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THE
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VOLUME THE SEVENTIETH

BEING

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RELATING CHIEFLY TO THE YEAR

1933.

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A. K. TOTTON, H. M. MUIR WOOD, AND THE IMPERIAL INSTITUTE OF
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EDITED BY

W. L. SCLATER, M.A., F.Z.S.

Explorate solum : sic fit via certior ultra.

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PREFACE.

THE seventieth Volume of the Zoological Record will be ready for distribution in November. The various parts have already been issued separately between June and October.

The present Volume contains 1,278 pages of Record matter; this is twenty pages more than that of the previous year. The number of new genera indexed is 2,087, an increase of 97 on that of the previous year.

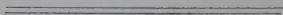
There has been no change among the Recorders since the previous issue of the Record.

As in the last two years, a short supplementary list of Journals recently instituted has been added to the List of New Genera. A new edition of the "World List of Scientific Periodicals" was published last July, and it is hoped to issue a new and revised list of "Titles of Journals" conforming to the new World List in the next volume of the Record.

The thanks of the Zoological Record Committee are again due to Dr. W. T. Calman, Mr. J. R. Norman, and Mr. J. R. le B. Tomlin

for assistance in reading proofs of those Records in regard to which they have had special knowledge, and to Mr. H. G. K. Molineux for a number of obscure references to papers in Russian periodicals.

The accounts of the "Record Fund," here appended, show a further slight increased balance—a most satisfactory position.



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EXPLANATORY.

This Volume is printed in the Divisions enumerated on p. vii.

The pagination of each Division is separate, and is given at the top corner of the pages. The number and name of the Division is given as a heading on each page. The date 1933 corresponding to the bulk of the literature indexed is given at the top of each page.

In the Subject Index of each Division authors are quoted by name only. The full references will be found in the Title Section of the Division.

The Literature indexed is mainly that of 1933 but includes entries for earlier years that have been received too late for inclusion in previous volumes.

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I. COMPREHENSIVE ZOOLOGY

ARRANGED BY

W. L. SCLATER, M.A.

This section includes works that deal with more than one branch of Zoology, or that are of general interest to Zoologists. It is, therefore, not complete in itself as regards any one subject included in it. The special records complete each subject. A few memoirs included in the special records are repeated in this division as well as the literature on the Genetics of *Drosophila* and some other insects used as a vehicle for these special researches.

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II. PROTOZOA

ARRANGED BY

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Parasitism: General.—Transmission: infectivity: ADLER, 9; ANON., 26; BARLOVATZ, 47; BECKER, 51; BECKER & HALL, 55, 56; BEDFORD & COLES, 58; BOWDEN, 89; BOYD & STRATMAN-THOMAS, 93, 94; BRUYNOGHE, 102; CLARK & DUNN, 160; CIUCA, etc., 159; COATNEY, 161; CORSON, 171; DAVEY & GORDON, 205; DUKE, 226, 227, 228, 230, 231; FAIRBAIRN, 250; FINE, 258; FRYE & MELENEY, 273; HOLMES, 361; HOOFF & HENRARD, 363; JELKS, 394; JOUKOFF & KRASSIKOVA, 407; KATAYAMA, 412; KOFROID & DONAT, 434; KRISHNAN, etc., 451; KRÜGER, 452; KUWABARA, 456; LAUNOY, 464; LESTER, 471; LLOYD, 482; MAJID & SINTON, 502; MATHESON, etc., 511; MAYER, 514; MAZZA, etc., 525; MELENEY & FRYE, 528; MER, 533; MOSHKOVSKI, 544; NAPIER, etc., 553, 554; NICOLAU, 570; NICOLLE, 572; NIESCHULZ, 574; NISHIMURA, 576; RAŠIN, 631; REES, 638; REGENDANZ, 640; REGENDANZ & REICHENOW, 641; ROMAÑA & SCHÜRMANN, 659; SASSUCHIN, 678; SCHWETZ, 700; SERGEANT, etc., 713; STRICKLAND, etc., 743; TOUMANOFF, 775; WALLACE, 798; YAKIMOFF, 828; YORKE, etc., 845, 846.

Experimental infection: ABDUL MAJID, 1; BECKER, 52; BOYD & STRATMAN-THOMAS, 92, 93; DOBELL, 219; DUKE, 226; GRILLO, 317; HEGNER, 340; KATAYAMA, 412; KESSEL, 413; KOFROID & DONAT, 435, 436; LAUNOY & PRIEUR, 466; LESTER, 471; MANWELL, 503; MATHEWSSJAN & ZATURJAN, 512; MAYNE, 515; MAZZA & ROMAÑA, 522; MAZZA, etc., 525; MELENEY & FRYE, 529; MER, 533; REGENDANZ, 639; SIMIĆ, 721, 722, 723; SINTON & MULLIGAN, 724, 725; VENARD, 791; WATT, 800; YAKIMOFF & GOUSSEFF, 832; ZSCHUCKE, 854.

"Carriers," "Reservoirs": ACTON, 6; ANDREWS & ATCHLEY, 23; ARNETT, etc., 35; BENNETT, 64; BOYNTON & WOODS, 95; BROWN, 100; CLARK & DUNN, 160; EPSTEIN, 246; GIORDANO, 303; MACKIE & NAUSS, 498; MAZZA, etc., 516; ROMAÑA & SCHÜRMANN, 659; SKIDMORE, 726; STRONG, etc., 745.

Effect upon host: ALLEN, 14; BALL, 44; BEATMAN, 50; BECKER, 52; BLAND, etc., 72; BOS, 79; BORCHI, 78; BUROWA, 107; CHUNG & CH'IN, 157; ELAUT, 239; ELSON, 243; GALLIARD, 280; GARNHAM, 287; GREAVES, 315; HERRICK, 349; HU, 372; KOFROID, etc., 438; KOTLÁN, 444; KRIGSMAN, 448; MANWELL, 504; NGAI & FRAZIER, 569; POWERS, 617; RAŠIN, 631; SCHWETZ, 694; SINTON & MULLIGAN, 725; SOUZA CAMPOS, 735; SUMNER, 748; SWEET, 750; THOMSON, 770; VITÉZ VON VARGA, 794; ZOTTA & TEODORESCO, 853.

Immunity, Serology: ADAMS, 7; ANON., 27; BECKER & HALL, 55, 57; BENNETT, 64; BOYD & STRATMAN-THOMAS, 93; BROWN, 99; BUCK, 103; CIUCA, etc., 159; CORSON, 170, 171, 172; CRAIG & KAGY, 179; D., 200; DIAS, 216; FAIRBAIRN, 249, 250; FLAKS & BER, 261; FONSECA, 232; GILL, 301; KIKUTH, 420; KLIIGLER & MER, 429; KRISHNAN, etc., 451; LANGEN, 463; LESTER, 471; MULLIGAN & SINTON, 547; NATTAN-LABRIER & GRIMARD-RICHARD, 556; NEUMANN, 567; PHILPOTT, 595; POINDEXTER, 611; REINER & CHAO, 647; SCHILLING, 687; SCHILLING, etc., 689; SERGEANT, etc., 709, 710, 711, 712; STOTT, 742; THOMSON, 769; WALLACE, 798; WORMALL, 818.

(Protozoa in relation to disease—vide under Economics.)

Parasitism: Hosts.—Man: BENDAUE, 65; BLAND, etc., 72; CONNELL, 167; FARJOT, 253; HIYEDA & SUZUKI, 354; HOGUE, 359; NIÑO, 575.

Man (infant), blood (Malaya): *Trypanosoma lewisi* (Mastigoph. Protozon.), JOHNSON, 401, 402.

Man, intestine (Spain): *Chilomastix granatensis* sp. n. (Mastigoph. Protozon.), RODRIGUEZ LÓPEZ-NEYRA & SUÁREZ PEREGRIN, 655.

Other Mammalia. — BECKER & BURROUGHS, 54; CHAVARRIA, 151; DIAS, 217; ELAUT, 239; FRYE & MELENEY, 274; GALLI-VALERIO & NICOLE, 283; GOUSSEFF, 310; KOFOID, etc., 439; KOFOID & DONAT, 435; KRISHNAN & LAL, 450; NEITZ, 563; NICOLAU & BALMUS, 571; PINTO, 603, 604; ROBERTSON, 652; SCHWETZ, 693, 695, 696, 697, 698, 699, 703. SIMIÓ, 723; SINTON & MULLIGAN, 725; THOMSON, 768; WENRICH, 802; YAKIMOFF, 826, 840.

Abacema sp. ("chinchilla mouse"), intestine and blood (Argentina): *Bodo abacemarum* sp. n. (Mastigoph. Protomon.), MAZZA & FIORA, 520.

Aenomys bacchante editus (Muridae), blood (Congo): *Trypanosoma aenomysi* sp. n. (Mastigoph. Protomon.), SCHWETZ, 693.

Alouatta caraya, blood (Argentina): *Trypanosoma forestali* sp. n. (Mastigoph. Protomon.), ROMAÑA 658.

Anomalurus jacksoni (flying squirrel), blood (Congo): *Trypanosoma anomaluri* sp. n. (Mastigoph. Protomon.), SCHWETZ, 693.

Ateles geoffroyi, caecum (Panama): *Taliasteria clarki* gen. n., sp. n. (Ciliata Holotr.), HEGNER & REES, 342.

Bos indicus, intestine (India): *Ophryoscolex spinosus* sp. n. (Ciliata Oligotr.), KOFOID & MACLENNAN, 437.

[*B. taurus*], stomach—(1) (Czechoslovakia): *Pseudobutschliella bovis* sp. n. (= *Butschliella bovis* sp. n.), *Holophryozoon bovis* sp. n., *Dasytricha bovis* sp. n., *D. elongatum* sp. n. (Ciliata Holotr.), JIROVEC, 398, 399; (2) (Yugoslavia): *Diplodinium* (*Ostracodinium*) *gracile* for. n. *babici* (Ciliata Oligotr.), WERTHEIM, 807.

Carnivora, intestine: list of coccidia recorded, YAKIMOFF & MATIKASCHWILI, 837.

Cabassus sp. (armadillo), intestine (Brazil): *Eimeria tatuzi* sp. n., *E. cabassusi* sp. n. (Sporoz. Coccid.), CARINI, 125.

Camelus bactrianus, intestine (Europe): *Eimeria cameli* sp. n. (Sporoz. Coccid.), NÖLLER, 578.

Canis aureus (jackal), intestine (Caucasus): *Eimeria dutoiti* sp. n. (Sporoz. Coccid.), YAKIMOFF, etc., 839.

C. lupus, blood (Russia): *Grahamella canis-lupus* sp. n. (Protozoa incertae sedis), KAMALOW 411.

Capra sibirica, intestine (Russia): *Eimeria nana* sp. n. (Sporoz. Coccid.), YAKIMOFF 826.

C. (Aegoceros) ibex, stomach (Yugoslavia): *Entodinium babici* sp. n., *Anoplodinium babici* sp. n., *Eudiplodinium maggi* f. n. *costatum*, *E. m. f. n. costato-curvonucleatum*, *Epidinium ecaudatum* f. n. *posterolatum*, *E. e. f. n. posterolato-caudatum*, *E. e. f. posterolato-caudatum* aber. *anceps*, *Entodinium exiguum*, *E. simplex* (Ciliata Oligotr.), WERTHEIM 808.

Cervus unicolor var, blood (Mauritius): *Trypanosoma evansi* (Mastigoph. Protomon.), ADAMS & LIONNET 8.

Chaetophractus v. vellerosus (armadillo), blood (Argentina): *Trypanosoma cruzi* (Mastigoph. Protomon.), MAZZA & SCHÜRMANN 524.

Chimpanzee, intestine (U.S.A.: captive): Various intestinal protozoa, HEGNER 341.

Citellus pygmaeus: list of recorded parasitic protozoa, SASSUCHIN & TIFLOW 681.

Crocidura aranea, intestine (Switzerland): *Eimeria crocidurae* sp. n. (Sporoz. Coccid.); lung: *Toxoplasma crocidurae* sp. n. (Sporoz.), GALLI-VALERIO 282.

Erinaceus europaeus, intestine (Russia): *Isospora rastegaiev* sp. n. (Sporoz. Coccid.), YAKIMOFF & MATIKASCHWILI 835.

Felis domestica, intestine (Russia): *Eimeria cati* sp. n. (Sporoz. Coccid.), YAKIMOFF 822.

Funisciurus congicus (squirrel), blood (Congo): *Trypanosoma sciuri* sp. n. (Mastigoph. Protomon.), SCHWETZ 693.

Guerlinguetus ingrami (squirrel), intestine (Brazil): *Eimeria botelhoi* sp. n. (Sporoz. Coccid.), CARINI 135.

Hapale jacchus penicillatus, intestine (Belgium: imported): *Isospora arctopitheci* sp. n. (Sporoz. Coccid.), RODHAIN 654.

Herpestes ichneumon, intestine (Tunis): *Isospora rivolta* (Sporoz. Coccid.), BALOZET 45.

Horse, blood (Russia): *Nuttalia minor* sp. n. (Sporoz. Haemospor.), SASSUCHIN 678.

Macaca irus (= *Macacus cynomolgus*), blood (Germany: from Java): *Ento-
polypoides macaci* gen. n., sp. n. (Sporoz. Haemospor.), MAYER 513.

Marmota monax, intestine (U.S.A.): *Trichomonas wenrichi*, *T. digranula*, *T. marmotae*, *T. cryptonucleata* spp. n. (Mastigoph. Protomon.), CROUCH 180.

Mazama nemorivagus and *M. rufa toba*, blood (Argentine): *Trypanosoma mazamorum* sp. n. (Mastigoph. Protomon.), MAZZA, etc., 523.

Meles taxus, intestine (Hungary): *Eimeria melis* sp. n. (Sporoz. Coccid.), KOTLÁN & POSPESCH. 445.

Nyctereutes procyonides ussuriensis, intestine (Russia): *Isospora rivolta* (Sporoz. Coccid.), YAKIMOFF & MATIKASCHWILI 836.

Ovis musimon or *O. orientalis*, intestine (Russia): *Eimeria nana* sp. n. (Sporoz. Coccid.), YAKIMOFF 826.

Phyllostoma hastatus, blood (Brazil): *Trypanosoma phyllostomae* (Mastigoph. Protomon.), CARINI 129

Procyon (= *Notocyon*) *lotor* (raccoon), intestine (Russia: from America): *Eimeria nuttalli* sp. n. (Sporoz. Coccid.), YAKIMOFF & MATIKASCHWILI 837.

Sylvilagus minensis (rabbit), intestine (Brazil): *Eimeria pintoensis* sp. n. (Sporoz. Coccid.), FONSECA 263.

Warthog [*Phacocoerus aethiopicus*], blood (Zululand): piroplasm of *Theileria mutans*-type (Sporoz. Haemosporid.), NEITZ 563.

Zebu, blood (Caucasus): *Trypanosoma theileri* (Mastigoph. Protomon.), YAKIMOFF, etc., 841.

Aves: BOUGHTON, 83; ČERNÝ, 143; DUKE, 230; ROSENBUSCH, 664; SCHWETZ, 693; YAKIMOFF, 831; YAKIMOFF, etc., 833.

Birds (various), blood (Argentine): *Haemoprcteus* (indet.) (Sporoz. Haemospor.), MAZZA & FIORA 519.

Anser domesticus (goose), intestine (Hungary): *Eimeria parvula* sp. n., *E. nocens* sp. n. (Sporoz. Coccid.), KOTLÁN 444.

Cathartes aura septentrionalis, intestine (U.S.A.): *Eumonospora tremula* gen. n., sp. n. (Sporoz. Coccid.), ALLEN 15.

Colinus v. virginianus, intestine (U.S.A.): *Eimeria tenella*, *E. acervulina* (Sporoz. Coccid.), VENARD 791.

Nucifraga caryocatactes, intestine (Switzerland): *Isospora nucifragae* sp. n. (Sporoz. Coccid.), GALLI-VALERIO 282.

Paroaria cristata and *Thectocercus acuticaudatus*, blood (Argentine): *Trypanosoma balfouri* sp. n. (Mastigoph. Protomon.), MAZZA, etc., 521.

Parotia lawesi, intestine (U.S.A.: from New Guinea): *Isospora* sp. (Sporoz. Coccid.), BOUGHTON 84.

Phalacrocorax carbo lugubris, intestine (Victoria Nyanza): *Eimeria urnula* sp. n. (Sporoz. Coccid.), HOARE 355.

Pitangus sulphuratus bolivianus, blood (Argentine): *Haemoproteus* (indet.) (Sporoz. Haemospor.), MAZZA, etc., 518.

Serinus canarius, blood (Brazil: European origin): *Haemogregarina serini* sp. n. (Sporoz. Coccid.), ARAGÃO 34.

Reptilia: PHISALIX, 596; SCHWETZ, 693; VARGA, 786.

Reptiles, various, intestine: *Entamoeba* sp. (Rhizop. Amoeb.), RATCLIFFE & GEIMAN 632.

Lizards and snakes, list of species of *Isospora* recorded (Sporoz. Coccid.), HOARE 355.

Ameiva ameivae, intestine (Brazil): *Isospora ameivae* sp. n. (Sporoz. Coccid.), CARINI 131.

Bitis arietans, intestine (Uganda): *Isospora dirumpens* sp. n. (Sporoz. Coccid.), HOARE 355.

Boaedon lineatus, intestine (Uganda): *Wenyonella africana* gen. n., sp. n. (Sporoz. Coccid.), HOARE 355.

Bothrops jararaca (= *Lachesis lanceolatus*), intestine (Brazil): *Isospora neivai* sp. n. (Sporoz. Coccid.), PINTO & MACIEL 605.

"Caiman" [?], intestine (Brazil): *Eimeria pintoï* sp. n. (Sporoz. Coccid.), CARINI 132.

Chamaeleo vulgaris, blood (Tripoli): *Haemogregarina chamaeleonis* sp. n. (Sporoz. Coccid.), FRANCHINI 268.

Chlorosoma aestivum, intestine (Brazil): *Caryospora brasiliensis* sp. n. (Sporoz. Coccid.), CARINI 136.

Emyda granosa, blood (India): *Haemogregarina xavieri* sp. n. (Sporoz. Coccid.), MELLO 530.

E. granosa vittata, blood (India): *Haemogregarina malabarica* sp. n. (Sporoz. Coccid.), MELLO 530.

Erimias argus, rectum (Japan) *Monocercomonas lacertae* sp. n. (Mastigoph. Protomon.), TANABE 753.

Erythrolamprus aesculapi (Ophid.), intestine (Brazil): *Eimeria aesculapi* sp. n. (Sporoz. Coccid.), CARINI 126.

Hemidactylus brookei, intestine (India): *Janickiella duboscqi* sp. n. (Mastigoph. Protomon.), MELLO 532.

Leimadophis poecilogyrus (Ophid.), intestine (Brazil): (1) *Eimeria poecilogyri* sp. n. (Sporoz. Coccid.), CARINI 126; (2) *Nyctotherus amarali* sp. n. (Ciliata Heterotr.), CARINI 137.

Liophis jaegeri (Ophid.), intestine (Brazil): (1) *Eimeria jaegeri* sp. n. (Sporoz. Coccid.), CARINI 126, 128; (2) *Nyctotherus jaegeri* sp. n. (Ciliata Heterotr.), CARINI 137, 139.

Ophis meremmi, intestine (Brazil): (1) *Zelleriella boipevae* sp. n. (Opalin.), CARINI 127; (2) *Nyctotherus boipevae* sp. n. (Ciliata Heterotr.), CARINI 137.

Psammophis sibilans, intestine (Uganda): *Caryospora legeri* sp. n. (Sporoz. Coccid.), HOARE 355.

Pseudoboa rhombifera, intestine (Brazil): *Nyctotherus coralli* sp. n. (Ciliata Heterotr.), CARINI 137.

Sybinomorphus mikanii (Ophid.), intestine (Brazil): *Eimeria mikanii* sp. n. (Sporoz. Coccid.), CARINI 126.

Tamnodynastes strigilis, gall bladder (Brazil): *Eimeria arnaldoi* sp. n. (Sporoz. Coccid.), PINTO & MACIEL 605.

Trachysaurus rugosus, intestine (Australia): *Nyctotherus trachysauri* sp. n. (Ciliata Heterotr.) and other protozoa ("Endamoeba" spp. 1 and 2, *Copromonas*, *Bodo*, *Trichomastix* or *Trichomonas*—spp. indet.), JOHNSTON 404.

Amphibia: JORG, 405; VITÉZ VON VARGA, 794.

Bufo marinus, gall bladder (Brazil): *Myxidium lindoyense* n. sp. (Sporoz. Myxospor.), CARINI 134.

Engystoma ovale, intestine (Brazil): *Zelleriella faleata* sp. n. (Cilioph. Opalin.), CARINI 122.

Leptodactylus ocellatus, intestine (Brazil): *Zelleriella cornucopia* sp. n. (Cilioph. Opalin.), CARINI 124.

Rana limnocharis, intestine (China) *Protoopalina limnocharis* sp. n., *Opalina undulata* sp. n., *O. acuminata* sp. n. (Opalinata), *Nyctotherus nankingensis* sp. n., *N. pygmaeus* sp. n. (Ciliata Heterotr.), NIE 573.

R. spinosa, intestine (China): *Nyctotherus cheni* sp. n. (Ciliata Heterotr.), WICHTERMAN 811.

Pisces: SHAW, 716.

Leporinus sp. (and other unnamed fish), muscles (Brazil): *H. [enneguya?]* *travassosi* sp. n. (Sporoz. Myxospor.), GUIMARÃES & BERGAMIN 320.

Mugil brasiliensis, blood (Brazil): Atlantic: *Haemogregarina mugili* sp. n. (Sporoz. Coccid.), CARINI 130.

Ophicephalus striatus, blood (Siam.): *Trypanosoma ophicephali* sp. n. (Mastigoph. Protomon.), PEARSE 588.

Saccobranchus fossilis, blood (India): *Trypanosoma saccobranchi* sp. n. (Mastigoph. Protomon.), PEARSE 589.

Symbranchus marmoratus, blood (Brazil): *Trypanosoma bourouli* sp. n. (Mastigoph. Protomon.), *Haemogregarina gomesi* (Sporoz. Coccid.), NEIVA & PINTO 564.

Trichogaster trichopterus, blood (Siam): *Trypanosoma trichogasterae* sp. n. (Mastigoph. Protomon.), PEARSE 588.

Insecta: ELSON, 243; FENG, 256; KIRBY, 423; SEAMANS, 708.

Insects (general): Protozoa causing disease, PAILLOT 583.

Calotermes [= *Kalotermes*] (*Neotermes*) *insularis*, intestine (Australia): *Pseudovecovina uniflagellata* gen. n., sp. n. (Mastigoph. Protomon.), SUTHERLAND 749.

Kalotermes occidentis, intestine (California): *Proboscidiella occidentis* sp. n., *Devescovina polyspira* sp. n. (Mastigoph. Protomon.), LEWIS 476.

Leptothorax t. tuborum and *Solenopsis fugax* (ants), intestine (Germany): *Myrmicinosporidium durum* sp. n. (Sporoz. Haplospor.), HÖLLDOBLER 357.

Mastotermes darwiniensis, intestine (Australia): *Deltotrichonympha operculata* gen. n., sp. n. (Mastigoph. Hypermastig.), *Mixotricha paradoxa* gen. n., sp. n. (M. Protomon.), SUTHERLAND 749.

Osmoderma scabra, intestine (U.S.A.): *Nyctotherus osmodermæ* sp. n. (Ciliata Heterotr.), ZELIFF 849.

Porotermes grandis, intestine (Australia): *Spirotrichonympha grandis* sp. n. (Mastigoph. Hypermastig.), *Pseudotrypanosoma minimum* sp. n. (M. Protomon.), SUTHERLAND 749.

Rhodnius pallescens, intestine (Panama): *Trypanosoma cruzi* (Mastigoph. Protomon.), DUNN 235.

Stethothorax ater var. *brasiliensis*, intestine (Brazil): *Nyctotherus pintoii* sp. n. (Ciliata Heterotr.), CARINI 138.

Stolotermes victoriensis, intestine (Australia): *Spirotrichosoma obtusa* gen. n., sp. n., *S. capitata* sp. n. (Mastigoph. Hypermastig.), SUTHERLAND 749.

Zootermopsis angusticollis, Z. *nevadensis*, gut (U.S.A.): *Hirmocystis termitis*, *Kofoidina ovata* gen. n., sp. n. (Sporoz. Gregarin.), HENRY 346.

Myriapoda: *Diplopoda* sp., gut (India): *Monoductus lunatus* gen. n., sp. n. (Sporoz. Gregarin.), RAY & CHAKRAVARTY 635.

Zikadesmus sp., gut (India): *Stenophora khagendrae* sp. n. (Sporoz. Gregarin.), RAY 633.

Crustacea: *Branchipus grubyi*, intestine (Europe): *Branchipocola nucleomira* gen. n. sp. n. (Rhizop. Amœb.), BREINDL 97.

Metaplex dentipes (crab), intestine (India): *Steimina metaplexi* sp. n. (Sporoz. Gregarin.), PEARSE 589.

Pachygrapsus crassipes (crab), intestine (Pacific: U.S.A.): (1) *Uradio-*

phora sp. (Sporoz. Gregarin.), BALL 43; (2) *Cephaline gregarine* (indet.), BALL 44.

Pleuromamma spp. (marine copepods), various ecto- and endoparasitic protozoa, STEUER 738.

Uca dussumieri (crab), intestine (Siam): *Gregarina ucae* sp. n. (Sporoz. Gregarin.), PEARSE 588.

Xiphocaridina compressa, moults, (ectoparasitic) (Japan): *Hyalospira caridinae* gen. n., sp. n. (Ciliata Holotr.), MIYASHITA 538.

Echinodermata: *Anthocidaris crassispina*, intestine (Japan: Pacific): *Cyclidium ozakii* sp. n. (Ciliata Holotr.), *Strobilidium rapulum* sp. n. (C. Oligotr.), YAGUI 820.

Strongylocentrotus droebachiensis, intestine (Bay of Fundy, U.S.A.): *Cryptochilidium gracile* sp. n., *Uronema sociale* sp. n., *Plagiopyla minuta* sp. n., *Euplotes* sp., *Trichodina* sp. (Ciliata Holotr.), POWERS 617.

Toxopneustes variegatus, intestine (N. Atlantic, U.S.A.): *Anophrys verniformis* sp. n., *Colpoda fragilis* sp. n. (Ciliata Holotr.), POWERS 617.

Mollusca: *Bithynia tentaculata*, intestine (Poland): *Protoanoplophrya bithyniae* sp. n. (Ciliata Holotr.), RAABE 625.

Doris tuberculata, eggs (laid) (Wimereux: France): *Astasia doridis* sp. n. (Mastigoph. Euglen.), ZERLING 850.

Physa fontinalis, exterior parts of body (Poland): *Heterocineta janickii* sp. n. (Suctorina), JAROCKI 392.

Pisidium casertanum, intestine (Poland): *Desmophrya contorta* gen. n., sp. n. (Ciliata Holotr.), RAABE 624.

Siliqua patula, mantle cavity (Pacific, U.S.A.): *Conchophthirius caryoclada* sp. n. (Ciliata Holotr.), KIDDER 418.

Viviparus fasciatus, mantle cavity and tentacles (Poland): *Heterocineta hoeffi* sp. n. (Suctorina), JAROCKI 392.

Gephyrea: *Urechis unicinctus*, intestine (Japan): *Enterocystis yumushii* sp. n., *Lecudina fluctus* sp. n. (Sporoz. Gregarin.), IITSUKA 375.

Annelida: *Criodrilus* sp., intestine (Japan): *Hoplitophrya criodrili* sp. n., *Protoradiophrya minuta* sp. n., *Ptychostomum bacteriophilum* sp. n. (Ciliata Holotr.), MIYASHITA 537.

Haemopsis sanguisugae = *Aulastomum gulo* (horse-leech), intestine (England): *Hexamita gigas* sp. n. (Mastigoph. Diplomon.), BISHOP 70.

Helodrilus foetidus, seminal vesicles (U.S.A.): *Zygocystis wenrichi* sp. n., *Apolocystis gigantea* sp. n. (Sporoz. Gregarin.), TROISI 776.

Lumbricus rubellus, seminal vesicles (U.S.A.): *Zygocystis wenrichi* sp. n., *Apolocystis gigantea* sp. n., *A. minuta* sp. n. (Sporoz. Gregarin.), TROISI 776.

L. terrestris, *L. castaneus*, seminal vesicles (U.S.A.): *Apolocystis minuta* sp. n. (Sporoz. Gregarin.), TROISI 776.

Pheretima compta, coelom (Burma): *Nellocystis birmanica* gen. n., sp. n. (Sporoz. Gregarin.), GATES 288.

Potamilla reniformis (Polychaeta), intestine (Atlantic: Plymouth): *Meroselenidium keilini* gen. n., sp. n., *Selenidium potamillae* sp. n. (Sporoz. Gregarin.), MACKINNON & RAY 499.

Coelenterata: Siphonophores (Diphyidae), statocyst (Mediterranean): *Foettingeriid* ciliate (Holotrich. indet.), ROSE 662.

Protozoa: KRÜGER, 452; YAKIMOFF & WINNIK, 842.

Protozoa: general review of hyperparasites recorded from parasitic protozoa, SASSUCHIN 679.

Eimeria magna from rabbit), oocyst: Bacterial infection, YAKIMOFF & WINNIK 842.

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†*Lenticulina staufensis, biformis, dubia* spp. n. Secondary Schwabia, PAALZOW Jhft. Ver. vaterl. Naturk. Württemb. 88 p. 81 figs.

†*Lepidocyclina novitasensis, anti-guensis, menzeri, hodgensis, wetherelensis, tempanii, tantoyucensis, crassimargo, piedrasensis, dartoni*, spp. n. *parvula* var. n. *crassicosta*, Tertiary Mexico, VAUGHAN Smithson. Misc. Coll. 89 p. 1 figs.—†*L. sanluisensis* sp. n. α and β spp. indet. Oligocene Venezuela, GRAVELL Smith. Mus. Coll. Wash. 89 p. 1 figs.—†*L. yurnagunensis* var. n. *morganopsis* (description) Oligocene Cuba, VAUGHAN J. Wash. Acad. Sci. 23 p. 352.

†*Liebusella* gen. n. [Genoholotype: *Lituola soldani* Jones & Parker] Eocene to Recent, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 32 figs.

†*Listerella* gen. n. [Genoholotype: *Clavulina primaeva* Cush.] Eocene to Recent, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 32 figs.

†*Lituotuba dubia* sp. n. Devonian Iowa, MILLER & CARMEN Journ. Paleont. 7 p. 423 figs.

†*Lockhartia* gen. n. including *Dictyoconoides haimeii* (Davies), *Conulites tipperi* Davies, *Dictyoconoides conditi* Nuttall, *Rotalia neuboldi* (d'Archiac and Haime) Tertiary India, DAVIES Trans. Roy. Soc. Edinb. 57 p. 397 figs.

†*Loxostomum cushmani* sp. n. Cretaceous Canada, WICKENDEN Trans. Roy. Soc. Can. 26 p. 85 figs.

Loxostoma rostrum sp. n. Pacific, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 77 figs.

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†*Massilina jacksonensis* sp. n., *jacksonensis* var. n. *punctato-costata* Upper Eocene, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 1 figs.—†*M. marylandica, glutinosa, mansfieldi* spp. n. Miocene U.S.A., CUSHMAN & CAHILL Prof. Pap. U.S. Geol. Surv. 175A p. 1 figs.—*M. planata, australis* spp. n. Tropical Pacific, CUSHMAN Bull. U.S. Nat. Mus. 161 p. 1 figs.

†*Miliammmina manitobensis* sp. n. Cretaceous Canada, WICKENDEN Trans. Roy. Soc. Can. 26 p. 85 figs.

†*Miliola jacksonensis* sp. n. Upper Eocene, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 1 figs.

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Mimosina pacifica sp. n. Pacific, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 77 figs.

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†*Nummulites varnensis* sp. n. Eocene Varna, GOÜEV Z. Bulgar. geol. Ges. Sofia 5 p. 21.

Patellina advena var. n. *altiformis* Pacific, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 77 figs.

Patellinella fijiana sp. n. Pacific, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 77 figs.

†*Pavonina triformis* sp. n. Oligocene and Miocene Australia, PARR Proc. Roy. Soc. Vict. 45 p. 28 figs.

†*Pellatispira hoffmeisteri, fulgeria* spp. n. Eocene Pacific Is., HOFFMEISTER & WHIPPLE Bull. Bishop Mus. Honolulu 96 p. 79.

Pelosina fusiformis sp. n., *variabilis* var. n. *constricta* S. Atlantic, EARLAND Discovery Reports 7 p. 27 figs.

†*Pentasyderina* gen. n. *tessallata* sp. n. (First published by Niccolucci, G., Rend. Accad. Sci. Naples 2 1846 p. 351) = Eocene Monte Mario, NEVIANI Mem. Accad. Nuovi Lincei 16 p. 222.

†*Pernerina* gen. n. [Genoholotype: *Bulimina depressa* Perner] Eocene Germany and Czechoslovakia, CUSHMAN Amer. J. Sci. New Haven 26 p. 19 figs.

†*Planularia catahoulaensis, danvil-
lensis, ouachitaensis* spp. n. Eocene U.S.A., HOWE & WALLACE Bull. Dept. Conserv. Louisiana 2 p. 1 figs.—†*P. cooperensis* sp. n. Upper Eocene, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 1 figs.—†*P. feifeli* sp. n. Secondary Schwabia, PAALZOW Jhft. Ver. vaterl. Naturk. Württemb. 88 p. 81 figs.

†*Planulina cocoaensis* var. n. *cooperensis* Upper Eocene, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 1 figs.—†*P. haydoni* sp. n. Tertiary Oregon, CUSHMAN & SCHENK Univ. Calif. Pub. Geol. 7 p. 305 figs.

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†*Polydixodina persica* sp. n. Permian Persia, KUHN (KAHLER) Palaeontographica 79 p. 168.

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†*Saccammina biosulcata* sp. n. Paleozoic Oklahoma, MOREMAN Journ. Paleont. 7 p. 393 figs.

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†*Triloculina crassa*, *sypho* spp. n. (First published by Niccolucci, G., Rend. Accad. Sci. Naples 2 1846 p. 351) Eocene Monte Mario, NEVIANI Mem. Accad. Nuovi Lincei 16 p. 222.—*T. oceanica*, *spinata* spp. n., *labiosa* var. n. *sparsicostata*, *oceanica* var. n. *flintiana* Tropical Pacific, CUSHMAN Bull. U.S. Nat. Mus. 161 p. 1 figs.—†*T. tricosata* var. n. *fornasini* Miocene Italy, LIPPARINI Giornale di Geologia 7 p. 55 figs.

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†*Tritaxia manitobensis* sp. n. Cretaceous Canada, WICKENDEN Trans. Roy. Soc. Can. 26 p. 85 figs.

†*Trochammina albertensis*, *ribstonensis*, spp. n. Cretaceous Canada, WICKENDEN Trans. Roy. Soc. Can. 26 p. 85 figs.—†*T. bursaria* sp. n. Paleozoic Australia, CHAPMAN Proc. Roy. Soc. Vict. 45 p. 245 figs.—†*T. fornasinii* sp. n. Miocene Italy, LIPPARINI Giornale di Geologia 7 p. 113 figs.

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Urnula arctica sp. n. *Urnula depressa* nom. n. for *Sorosphaera depressa* Heron-Allen & Earland, Greenland, CUSHMAN Smithson. Misc. Coll. 89 p. 1 figs.

†*Urnulina rotundata* sp. n. Miocene U.S.A., CUSHMAN & CAHILL Prof. Pap. U.S. Geol. Surv. 175A p. 1 figs.

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†*Valvulineria asterigerinoides* sp. n. Cretaceous Texas, PLUMMER Univ. of Texas Bull. 3101 p. 109 figs.—†*V. jacksonensis* sp. n. Upper Eocene, CUSHMAN Contr. Cushman Lab. Foram. 1933 p. 1 figs.

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3.—MASTIGOPHORA.

Mastigophora, list of freshwater forms from Hungary, SCHERFFEL 686.

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(a) Chrysomonadina.

Acanthoea gen. n. *brevipoda*, *specabilis* spp. n., ELLIS Ann. Soc. zool. Belg. 60 p. 49 figs.

Choanoeca gen. n. *perplexa* sp. n. marine and brackish, ELLIS Ann. Soc. zool. Belg. 60 p. 49 figs.

Diaphanoeca gen. n. *grandis*, *parva* spp. n. brackish, ELLIS Ann. Soc. zool. Belg. 60 p. 49 figs.

Dicraspedella gen. n. *stokesi* sp. n. *stokesi* var. n. *longipes*, *botrytis* marine, ELLIS Ann. Soc. zool. Belg. 60 p. 49 figs.

Diploeca gen. n. *placita* sp. n. fresh-water, ELLIS Ann. Soc. zool. Belg. 60 p. 49 figs.

Exuviella *cassubica* sp. n. marine Baltic, WOŁOSZYŃSKA Arch. Hydrobiol. Ichthyol. 3 p. 250 figs.

Pachysoeca gen. n. *longicollis*, *depressa* spp. n. brackish, ELLIS Ann. Soc. zool. Belg. 60 p. 49 figs.

Salpingoeca gen. n. *megacheila*, *de-saeedeleeri*, *huxleyi*, *undulata*, *cardiforma* spp. n., *cardiforma* var. n. *tulepoda* brackish, ELLIS Ann. Soc. zool. Belg. 60 p. 49 figs.

Stephanoeca gen. n. *diplocostata*, *kenti*, *constricta*, spp. n., *ampulla* nom. n. for *Salpingoeca ampulla* Saville Kent marine and brackish, ELLIS Ann. Soc. Zool. Belg. 60 p. 49 figs.

Thaumatomonas gen. n. *lauterborni* sp. n., SAEDELEER Rec. Inst. Zool. Torley-Rousseau 3 p. 89 figs.

(b) Cryptomonadina.

Chroomonas *cyaneus* sp. n. sewage, LACKEY Biol. Bull. Woods Hole 63 p. 287 figs.—*C. reflexa* sp. n., fresh water, Middle Asia, KISSELJOV Acta Univ. Asiae Med. 9 p. 1 figs.

(c) Dinoflagellata.

Amphidiniopsis gen. n. *kofoidi* sp. n. Marine Baltic, WOŁOSZYŃSKA Arch. Hydrobiol. Ichthyol. 3 p. 250 figs.

†*Ceratium operculatum* sp. n., *fusus* var. n. *rhomboides*, *ovatum*, *nodosum* *filosum* Baltic, WETZEL Palaeontographica 77 p. 141 figs.—*C. pulchellum* var. n. *indicum* Pacific Ocean, BÖHM Bull. Bishop Mus. Honolulu 87 p. 1 figs.

Dinophysis *paulseni*, *levanderi*, *cassubica* spp. n. Marine Baltic, WOŁOSZYŃSKA Arch. Hydrobiol. Ichthyol. 3 p. 250 figs.

Diplosalis *minor* var. n. *sphaerica* Baltic, WOŁOSZYŃSKA Arch. Hydrobiol. Ichthyol. 3 p. 250 figs.

Dolichodinium gen. n. nom. n. for *Heterodinium* Kofoid & Michener. Type species: *D. lineatum* Pacific, KOFOID & ADAMSON Mem. Mus. Comp. Zool. Howard 54 p. 1 figs.

Gonyaulax *helensis* sp. n. marine Baltic, WOŁOSZYŃSKA Arch. Hydrobiol. Ichthyol. 3 p. 250 figs.

Heterodinium subgen. n. nom. n. for *Euheterodinium* Kofoid. Type species: *Heterodinium scrippsi*, *H. dispar* sp. n. Pacific, KOFOID & ADAMSON Mem. Mus. Comp. Zool. Harvard 54 p. 1 figs.—*H. (Platydinium) scotti*, *pavillardii*, *asymmetricum*, *varicator* spp. n. Pacific, KOFOID & ADAMSON Mem. Mus. Comp. Zool. Harvard 54 p. 1 figs.—*H. pulchrum* sp. n. Adriatic, BÖHM Arch. Protistenk. 80 p. 351 figs.

Histioneis dubia sp. n. Adriatic, BÖHM Arch. Protistenk. 80 p. 351 figs.

†*Lithoperidinium* gen. n. *oamaruense* sp. n. Oligocene New Zealand, DEFLANDRE Bull. Soc. zool. Fr. 58 p. 265 figs.

Parahistioneis varians nom. n. for *P. pachypus* Adriatic, BÖHM Arch. Protistenk. 80 p. 351 figs.

†*Peridinites* gen. n. *parvulus*, *barbadiensis*, *globosus*, *sphaericus*, *ovalis*, *piriformis*, *diodon*, *perforatus*, spp. n., *piriformis* var. n. *compactus*, General, LEFÈVRE C.R. Acad. Sci. Paris 197 p. 81.

Peridinium *grenlandicum* sp. n. Baltic, WOŁOSZYŃSKA Arch. Hydrobiol. Ichthyol. 3 p. 250 figs.—*P. kincaidi* sp. n. freshwater British Columbia, WAILES Freshwater Algae and Protozoa, Mus. & Art Notes 1933 p. 1 figs.—†*P. ventricosum*, *tricuspis*, *illustrans* spp. n., *crassipes* var. n. *altum*, *pedunculatum* var. n. *divaricans* Baltic, WETZEL Palaeontographica 77 p. 141 figs.

Pheopolykrikos gen. n. *beauchampii* sp. n. l'Étang de Thau, CHATTON Bull. Soc. zool. Fr. 58 p. 251 figs.

Thaumatodinium gen. n. *molischi* sp. n. Adriatic, BÖHM Arch. Protistenk. 80 p. 351 figs.

(d) Euglenoidida.

Astasia doris sp. n., parasitic in laid eggs of nudibranchous mollusc, *Doris tuberculata*, Straits of Dover, ZERLING C.R. Soc. Biol. 112 p. 643.

Euglena inflexa, *E. obtuso-caudata*, *E. bucharica* spp. n., fresh water Middle Asia, KISSELJOV Acta Univ. Asiae Med. 9 p. 1 figs.

†*Ophiobolus* gen. n. *lapidarius* sp. n. Baltic, WETZEL Palaeontographica 77 p. 141 figs.

Phacus longicauda forma n. viz *torta*, *P. triquetus* var. n. *bucharica*, *P. acuminata* var. n. *minor*, fresh water, Middle Asia, KISSELJOV Acta Univ. Asiae Med. 9 p. 1 figs.—*P. izquierdoi* sp. n. freshwater, Santiago, PORTER Rev. chil. Hist. Nat. 36 p. 176 figs.—*P. pleuronectes*, *P. longicauda*, parasitized by *Sphaerita dangeardi* sp. n., JAHN 388.

Trachelomonas asymmetrica sp. n., *T. eurystoma* forma n. *minor*, *T. bucharica* sp. n., *T. affinis* forma n. *minor*, fresh water, Middle Asia, KISSELJOV Acta Univ. Asiae Med. 9 p. 1 figs.—†*T. ?cretacea* sp. n. Baltic, WETZEL Palaeontographica 77 p. 141 figs.—†*T. (Cargnegia) deformis* sp. n., *Trachelomonas (Clericia) volvocina* var. n. *protecta*, Tertiary, Italian Somaliland, FRENGUELLI Palaeontogr. ital. Siena 32 p. 67 figs.

(e) Phytomonadida.

Carteria bucharica sp. n., fresh water, Middle Asia, KISSELJOV Acta Univ. Asiae Med. 9 p. 1 figs.

Chlamydomonas pedalii sp. n., *C. uglianii* sp. n., fresh water, Middle Asia, KISSELJOV Acta Univ. Asiae Med. 9 p. 1 figs.

Pyramidomonas salina sp. n., fresh water, Middle Asia, KISSELJOV Acta Univ. Asiae Med. 9 p. 1 figs.

B. ZOOMASTIGINA.

(f) Protomonadida.

Bicoeca planktonica sp. n., from ponds, Middle Asia, KISSELJOV 425.

Bodo abracemarum sp. n. from the blood and intestine of a S. American "chinchilla mouse," *Abrocema* sp., MAZZA & FIORA VII Reun. Soc. Argent. Pat. Reg. Nor. 1932 p. 1013 figs.—*B. glissans* sp. n. sewage, LACKEY Biol. Bull. Woods Hole 63 p. 287 figs.

Bodopsis godboldi sp. n. sewage, LACKEY Biol. Bull. Woods Hole 65 p. 498 figs.

Chatterjeeia gen. n., nom. n. for *Tetrachilomastix bengalensis* Chatterjee, 1923 (type-sp.), RODRIGUEZ LOPEZ-NEYRA & SUAREZ PEREGRIN 657.

Chilomastix granatensis sp. n., from human intestine, Spain, RODRIGUEZ LOPEZ-NEYRA & SUAREZ PEREGRIN Bol. Soc. Españ. Hist. Nat. 32 p. 489 figs.; Publ. Oficial de la Com. Perman. de Investig. Sanit. 2.—*Chilomastix*, list of spp., with diagnostic characters, RODRIGUEZ LOPEZ-NEYRA & SUAREZ-PEREGRIN 657.

Codonosiga furcata var. n. *major*, fresh water, Middle Asia, KISSELJOV Acta Univ. Asiae Med. 9 p. 1 figs.

Devescovina polyspira sp. n. from termite, *Kaloterms occidentis*, LEWIS Univ. Calif. Pub. Zoo. 39 p. 77 figs.

Janickiella dubos[c]qi sp. n., from an Indian lizard, *Hemidactylus brookei*, MELLO VII Reun. Soc. Argent. Patol. Reg. Nor. 1932 p. 907 figs.

Mixotricha gen. n. *paradoxa* sp. n. from Australian termite, *Mastotermes darwiniensis*, SUTHERLAND Q. J. Micr. Sci. 76 p. 145 figs.

Monocercomonas lacertae sp. n., from Japanese lizard, *Erimias argus*, TANABE Keijo J. Med. 4 p. 367 figs.

Monosiga uglianii sp. n., fresh water, Middle Asia, KISSELJOV Acta Univ. Asiae Med. 9 p. 1 figs.

Proboscidiella occidentis sp. n., from termite, *Kaloterms occidentis*, LEWIS Univ. Calif. Pub. Zoo. 39 p. 77 figs.

Pseudodevescovina gen. n. *uniflagellata* sp. n., from Australian termite, *Caloterms (N.) insularis*, SUTHERLAND Q. J. Micr. 76 p. 145 figs.

Pseudotrypanosoma minimum sp. n., from Australian termite, *Porotermes grandis*, SUTHERLAND Q. J. Micr. Sci. 76 p. 145 figs.

Retortamonas (= *Embadomonas*) *intestinalis*, new variety (unnamed), from man, HOGUE 359.

Trichomonas wenrichi, *T. digranula*, *T. marmotae*, *T. cryptonucleata* spp. n., from woodchuck (*Marmota monax*), U.S.A., CROUCH J. Parasit. 19 p. 293 figs.—*T. parva* (of rat) and *T. intestinalis* (human), identity suggested, SRIMIO 721.

Trypanosoma forestali sp. n., from S. American monkey, *Alouatta caraya*. ROMAÑA VII Reun. Soc. Argent. Pat. Reg. Norte 1932 p. 1008 figs.—*T. sciuri* sp. n. (= *T. indicum*?) from squirrel, *Funisciurus congicus*; *T. anomaluri* sp. n. (= *T. denysi*?) from flying squirrel, *Anomalurus jacksoni*; *T. aenomysi* sp. n. from *Aenomys bacchante editus*, Belgian Congo, SCHWETZ Ann. Parasitol. 11 p. 287 figs.—*T. saccobranchi* sp. n., from Indian fish, *Saccobranchus fossilis*, PEARSE Rec. Ind. Mus. 34 p. 292 figs.—*T. trichogasteri* sp. n., *T. ophicephali* sp. n. from Siamese fish, *Trichogaster trichopterus* and *Ophicephalus striatus*, respectively, PEARSE J. Siam Soc. 9 p. 179 figs.—*T. bourouli* sp. n. from Brazilian fish, *Symbranchus marmoratus*, NEIVA & PINTO Ann. Fac. Med. 1 p. 79 figs. [& Scient. Med. 4 p. 28].—*T. mazamorum* sp. n., from S. American deer, *Mazama* spp., MAZZA, ROMAÑA & FLORA VII Reun. Soc. Argent. Patol. Reg. Nor. 1932 p. 990 figs.—*T. balfouri* sp. n., from S. American birds, *Paroaria cristata* and *Thectocercus acuticaudatus*, MAZZA et al. VII Reun. Soc. Argent. Patol. Reg. Nor. 1932 p. 1002 figs.

Trypanosoma marocanum var. n. *cameli*, parasite of "Debab" in Moroccan dromedaries. NATTAN-LARRIER & NOYER 1931 [omitted from Z.R. vol. lxxviii (Protozoa): 494]; *T. aegyptium* sp. n., parasite of "Debab" in Egyptian dromedaries. NATTAN-LARRIER & NOYER 1932 [omitted from Z.R. vol. lxxix (Protozoa): 433].—*T. evansi*, outbreak of Surra in deer, *Cervus unicolor* var., Mauritius, ADAMS & LIONNET 8.—*T. porci* Schwetz, 1932, independent status doubted, BOURGUIGNON 86.—*T. lewisi*, report of infection in child, Malaya, JOHNSON 401, 402.

Trypanosomes, mammalian (incl. human), revised classification, with key for identification of species, HOARE & COUTELEN 356.

(g) Hypermastigida.

Deltotrichonympha gen. n. *operculata* sp. n., from Australian termite, *Mastotermes darwiniensis*, SUTHERLAND Q. J. Micr. Sci. 76 p. 145 figs.

Spirotrichonympha grandis sp. n., from Australian termite, *Porotermes grandis*, SUTHERLAND Q. J. Micr. Sci. 76 p. 145 figs.

Spirotrichosoma gen. n. *obtusata* spp. n., from Australian termite, *Stolotermes victoriensis*, SUTHERLAND Q. J. Micr. Sci. 76 p. 145 figs.

(h) Diplomonadida.

Hexamita gigas sp. n., from gut of horse-leech, BISHOP Parasitol. 25 p. 163 figs.

(i) Polymonadida.

[Vacant.]

4. SPOROZOA.

A. COCCIDIOMORPHA.

(a) Gregarinida.

Apolocystis gigantea sp. n., from oligochaetes, *Helodrilus foetidus* and *Lumbricus rubellus*; *A. minuta* sp. n., from last-named and *L. terrestris*, *L. castaneus*, U.S.A., TROISI Trans. Amer. Micr. Soc. 52 p. 326 figs.

Enterocystis yumushii sp. n. from Gephyrean, *Urechis unicinctus* Japan, IITSUKA J. Sci. Hiroshima Univ. 2 p. 193 figs.

Gregarina ucae sp. n., from Siamese crab, *Uca dussumieri*, PEARSE J. Siam Soc. 9 p. 179 figs.

Hirmocystis termitis nom. n. for *Gregarina termitis* Leidy, 1881, HENRY 346.

Kofoidina gen. n. *ovata* sp. n. from American termites, *Zootermopsis* spp., HENRY Arch. Protistenk. 80 p. 101 figs.

Kofoidinidae fam. n. for *Kofoidina* gen. n., HENRY 346.

Lecudina fluctus sp. n., from gephyrean, *Urechis unicinctus*, Japan, IITSUKA J. Sci. Hiroshima Univ. 2 p. 193 figs.

Meroselenidium gen. n. *keilini* sp. n., from polychaete, *Potamilla reniformis*, MACKINNON & RAY Parasitol. 25 p. 143 figs.

Monoductidae fam. n. for *Monoductus* gen. n., RAY & CHAKRAVARTY 635.

Monoductus gen. n. *lunatus* sp. n., from Indian millipede, *Diplopoda* sp., RAY & CHAKRAVARTY Arch. Protistenk. 81 p. 352 figs.

Nellocystis gen. n. *birmanica* sp. n., from Burmese earthworm, *Pheretima compta*, GATES Biol. Bull. 65 p. 508 figs.

Selenidium potamillae sp. n., from polychaete, *Potamilla reniformis*, MACKINNON & RAY Parasitol. 25 p. 143 figs.

Steinina metaplaxi sp. n., from Indian crab, *Metaplex dentipes*, PEARSE Rec. Ind. Mus. 34 p. 292 figs.

Stenophora khagendrae sp. n., from Indian millipede, *Zikadesmus* sp., RAY Arch. Protistenk. 81 p. 343 figs.

Zygocystis wenrichi sp. n., from oligochaetes, *Lumbricus rubellus* and *Helodrilus foetidus*, U.S.A., TROISI Trans. Amer. Micr. Soc. 52 p. 326 figs.

(b) Coccidiida.

Coccidia of domestic animals (*Eimeria* and *Isospora*), differential diagnosis, YAKIMOFF 831.

Aggregatinae subf. n. (Eimeriidae), HOARE 355.

Barroussiinae nom. n. for *Barrouxiinae* Wenyon, 1926, HOARE 355.

Caryospora brasiliensis sp. n., from Brazilian snake, *Chlorosoma aestivum*, CARINI Rev. Biol. Hyg. S. Paulo 3 p. 85 figs.—*C. legeri* sp. n., from African snake, *Psammodphis sibilans*; *C.*, differential diagnoses of the three known spp., HOARE Parasitol. 25 p. 359 figs.

Cryptosporidiinae subf. n. (Eimeriidae), HOARE 355.

Eimeria, list of spp. (with dimensions), host-index, and bibliography, LEVINE & BECKER 475.—*E. butkai* Causey, 1926, probably not a coccidium, but yeast-like organism, KESSEL 414.

Eimeria pintoensis sp. n., from Brazilian wild rabbit, *Sylvilagus minensis*, FONSECA Mem. Inst. Butantan 7 p. 175 figs.—*E. crocidurae* sp. n., from shrew, *Crocidura aranea*, GALLI-VALERIO Zbl. Bakt. 129 p. 422.—*E. botelhoi* sp. n., from Brazilian squirrel, *Guerlinguetus ingrami*, CARINI Rev. Biol. Hyg. S. Paulo 3 p. 80 figs.—*E. arnaldoi* sp. n., from Brazilian snake, *Tamnodynastes strigilis*, PINTO & MACIEL Rev. Med.-Cirurg. Brasil 37 figs.—*E. cameli* sp. n., from *Camelus bactrianus*, Ural Region, NÖLLER Sitz. Ber. Ges. Naturf. Fr. 1932 p. 417.—*E. cati* sp. n., from domestic cat, Russia, YAKIMOFF Arch. Protistenk. 80 p. 172 fig.—*E. dutoiti* sp. n., from Caucasian jackal, *Canis aureus*, YAKIMOFF, MATIKASCHWILI & RASTEGAIEFF Arch. Protistenk. 80 p. 177 figs.

—*E. jaegeri* sp. n., from snake, *Liophis jaegeri*; *E. mikanii* sp. n., from snake, *Sybinomorphus mikanii*; *E. aesculapi* sp. n., from snake, *Erythrolamprus aesculapi*; *E. poecilogyri* sp. n., from snake, *Leimadophis poecilogyris*: Brazil, CARINI Ann. Parasit. 11 p. 472 figs.—*E. melis* sp. n., from badger, *Meles taxus*, KOTLÁN & POSPESCH Parasitol. 25 p. 102 figs.—*E. nana* sp. n., from *Capra sibirica* and *Ovis musimon* (or *orientalis*), Russia, YAKIMOFF Bull. Soc. Path. Exot. 26 p. 1192.—*E. nuttalli* sp. n., from raccoon, *Procyon lotor*, YAKIMOFF & MATIKASCHWILI Parasitol. 24 p. 574 figs.—*E. parvula* sp. n. (syn. *E. anseris* Kotlán, 1932, pro parte), *E. nocens* sp. n., from the domestic goose, Hungary, KOTLÁN Zbl. Bakt. 129 p. 11 figs.—*E. cabassusi*, *E. tatusi* spp. n., from Brazilian armadillo, *Cabassus* sp., CARINI Ann. Parasit. 11 p. 469 figs.—*E. pinto* sp. n., from Brazilian caiman (?), CARINI VII Reun. Soc. Argent. Patol. Reg. Nor. 1932 p. 922.—*E. urnula* sp. n., from African cormorant, *Phalacrocorax carbo lugubris*, HOARE Parasitol. 25 p. 359 figs.—*E. coelopeltis* nom. n. for *Isospora coelopeltis* Galli-Valerio, 1926, HOARE 355.

Eimeriidae, revision and new system of classification, HOARE 355.

Eumonospora gen. n. *tremula* sp. n., from turkey buzzard, *Cathartes aura septentrionalis*, U.S.A., ALLEN Trans. Amer. Micr. Soc. 52 p. 192 figs.

Haemogregarina chamaeleonis sp. n., from *Chamaeleo vulgaris*, Tripoli, FRANCHINI Atti Accad. Nuovi. Lincei. 86 p. 33 figs.—*H. mugili* sp. n., from marine fish, *Mugil brasiliensis*, Brazil, CARINI VII Reun. Soc. Argent. Pat. Reg. Norte 1932 p. 920 figs.—*H. serini* sp. n., from canary, *Serinus canarius*, Brazil, ARAGÃO C.R. Soc. Biol. 113 p. 214.—*H. gomesi* sp. n., from Brazilian fish, *Symbbranchus marmoratus*, NEIVA & PINTO Ann. Fac. Med. 1 p. 79 figs. [& Scient. Med. 4 p. 28].—*H. xavieri*, *H. malabarica* spp. n., from *Emyda granosa* and *E. g. vittata* resp., India, MELLO Arq. Esc. Med. Cirurg. N. Goa 8 pp. 1411, 1426 figs.

Isospora dirumpens sp. n., from puff-adder, *Bitis arietans*; *I. coelopeltis* Galli-Valerio, 1926, amended to *Eimeria coelopeltis*; *I.*, list of spp. recorded from snakes and lizards, HOARE Parasitol. 25 p. 359 figs.—*I. nucifragae* sp. n.,

from *Nucifraga caryocatactes* (nut-cracker), GALLI-VALERIO Zbl. Bakt. 129 p. 422.—*I. ameivae* n. sp., from Brazilian lizard, *Ameiva ameiva*, CARINI VII Reun. Soc. Argent. Pat. Reg. Nor. 1932 p. 921 figs.—*I. arctopithecii* sp. n., from marmoset, *Hapale jacchus penicillatus*, RODHAIN C.R. Soc. Biol. 114 p. 1357 figs.—*I. rastegaiev* [sic] sp. n., from hedgehog, *Erinaceus europaeus*, YAKIMOFF & MATIKASCHWILI Arch. Protistenk. 79 p. 72 figs.—*I. neivai* sp. n., from Brazilian snake, *Bothrops jararaca* (= *Lachesis lanceolatus*), PINTO & MACIEL Rev. Med.-Cirurg. Brazil 37 figs.—*I. crotali* nom. n. (provisionally) for *Cryptosporidium crotali* Triffitt, 1925, HOARE 355.

Jarrina Léger & Hesse, 1922, transferred to *Eimeria* (*sensu lato*), HOARE 355.

Wenyonella gen. n. *africana* sp. n. (Eimeriidae), from African snake, *Boaedon lineatus*, HOARE Parasitol. 25 p. 359 figs.

(c) Haemosporidia.

Babesia canis, life cycle in tick, *Dermacentor reticulatus*, REGENDANZ & REICHENOW 641.

Entopolypoides gen. n. *macaci* sp. n. (provisionally in Babesiidae), from blood of *Macaca irus*, Java, MAYER Arch. Schiffs.-u.-Tropenhyg. 37 p. 504.

Haemoproteus columbae Kruse, 1890, valid name for the parasite of the pigeon, COATNEY 161.

Nuttalia minor sp. n., from horse, Russia, SASSUCHIN Arch. Protistenk. 79 p. 276 figs.

Piroplasms, review of various systems of classification, with a revision, THOMSON & HALL 771.

Plasmodium ovale Stephens, 1922, discussion of nomenclature, CRAIG 178.

Plasmodium: description of records, critical review and revision of malarial parasites from various monkeys, SINTON & MULLIGAN 724.

Theileria parva, life-cycle in cattle, COWDRY & DANKS 177.

B. CNIDOSPORIDIA.

(d) Myxosporidia.

Myxosporidia, revision of classification with list of genera and spp., and bibliography, KUDO 453.

H. [enneguya?] travassosi sp. n., from freshwater Brazilian fish, GUIMERÃES & BERGAMIN Rev. Biol. Hyg. S. Paulo 4 p. 41 figs.

Myxidium lindoyense sp. n. from *Bufo marinus*, Brazil, CARINI Rev. Biol. Hyg. S. Paulo 3 p. 80 figs.

Thelohanellus gen. n. (fam. Myxobolidae), KUDO Trans-Amer. Micr. Soc. 52 p. 195.

Unicapsulidae fam. n., KUDO 453.

Wardiidae fam. n., KUDO 453

(e) Microsporidia.

[Vacant.]

(f) Actinomyxidia.

[Vacant.]

(g) Sarcosporidia.

Sarcocystis mucosa nom. n. for *Globidium mucosa* (Blanchard, 1885) Nöller, 1920 (= *Balbiana mucosa* Blanchard, 1885), COUTELEN 175.

(h) Haplosporidia.

Haplosporidian [?] structure of undetermined and doubtful nature from body of mite, *Biscirus intermedius*, described as protozoan "parasite," BOURNE 87.

Myrmicinosporidium durum sp. n., from European ants, HÖLLDOBLER Z. Parasitenk. 6 p. 91 figs.

SPOROZOA INCERTAE SEDIS.

Globidium mucosa, emended to *Sarcocystis mucosa* (q.v.), COUTELEN 175.

Toxoplasma crocidurae sp. n., from shrew, *Crocidura aranea*, GALLI-VALERIO Zbl. Bakt. 129 p. 422.

5. CILIOPHORA.

A. OPALINATA.

Opalina, *undulata*, *O. acuminata*, spp. n., from *Rana limnocharis*, China, NIE Contr. Biol. Lab. Sci. Soc. China 8 p. 183 figs.

Protoopalina limnocharis sp. n. from *Rana limnocharis* China, NIE Contr. Biol. Lab. Sci. Soc. China 8 p. 183 figs.

Zelleriella boipevae sp. n., from Brazilian snake, *Ophis meremii*, CARINI C.R. Soc. Biol. 112 p. 401 figs.—*Z. cornucopia* sp. n., from Brazilian frog, *Leptodactylus ocellatus*, CARINI Ann. Parasitol. 11 p. 301 figs.—*Z. falcata* sp. n., from a Brazilian frog, *Engystoma ovale*, CARINI Ann. Parasitol. 11 p. 115 figs.—*Z. jaegeri* sp. n., from Brazilian snake, *Liophis jaegeri*, CARINI Rev. Biol. Hyg. S. Paulo 4 p. 10; C.R. Soc. Biol. 112 p. 1001 figs.

B. CILIATA.

(a) Holotrichida.

Anophrys vermiformis sp. n., from sea-urchin, *Toxopneustes variegatus*, POWERS Biol. Bull. 65 p. 106 figs.

Askenasia humule sp. n. Freshwater, Siberia, GAJEWSKAJA Zoologica 32 p. 1 figs.

Atopochilodon gen. n. *arenifer* sp. n. Marine, KAHL Tierwelt der Nord- und Ostsee 23 p. 29 figs.

Bryophyllum lingua, *spathidioides*, *carinatum*, *caudatum* spp. n. Hungary, GELEI Arch. Protistenk. 81 p. 201 figs.

Bütschliella bovis sp. n. (vide: *Pseudobütschliella*), from Czechoslovakian cattle, JIROVEC Z. Parasitenk. 5 p. 584 figs.

Chaenea gigas sp. n. Marine, KAHL Tierwelt der Nord- und Ostsee 23 p. 29 figs.

Chilodonella rigida, *subtilis* spp. n. Marine, KAHL Tierwelt der Nord- und Ostsee 23 p. 29 figs.

Chilodontopsis caudata sp. n. Marine, KAHL Tierwelt der Nord- und Ostsee 23 p. 29 figs.

Cohnilembidae nom. n. for Lembidae Kahl. *Cohnilembus* nom. n. for *Lembus* Cohn Marine, KAHL Tierwelt der Nord- und Ostsee 23 p. 29 figs.

Coleps remanei, *similis* spp. n. Marine, KAHL Tierwelt der Nord- und Ostsee 23 p. 29 figs.

Colpoda fragilis sp. n., from sea urchin, *Toxopneustes variegatus*, POWERS Biol. Bull. 65 p. 106 figs.

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III. PORIFERA OR SPONGIDA

BY

M. BURTON, M.Sc.

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(ii) STREPTASTROSCLEROPHORA.

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(iv) LITHISTIDA.

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ARRANGED BY

A. KNYVETT TOTTON.

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V. ECHINODERMA

ARRANGED BY

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†*Echinanthus* ? *varnensis* sp. n. Eocene Bulgaria, GOČEV Z. Bulgar. geol. Ges. Sofia 5 pp. 52–53 fig. 9, pl. vii figs. 1–2.

Echinarachnius parma, BOONE 17 p. 145 fig. 6 and pl. xciii.

†*Echinobrissus brodei* p. 49 fig. 7, *dimidiatus* p. 48 fig. 6, cf. *icaunensis* p. 60 figs. 10 c–d, *letteroni* p. 59 figs. 8 g–h, 9 c–d, *micraulus* p. 65 fig. 11, *orbicularis* p. 37 figs. 3–4, *planatus* p. 42 fig. 5, *pulvinatus* p. 64 fig. 12, *scutatus* p. 56 figs. 8 c–f, 9 a–b, *truncatus* p. 62, BEURLEN 13.—*E. amplus* p. 103 fig. xv 6, p. 231 pl. x fig. 6; *chunicularis* p. 103 fig. xv 1–5 & 7, p. 227 pl. x fig. 1; *elongatus* p. 229 pl. x fig. 2; *latiporus* p. 103 fig. xv 8, p. 232 pl. x fig. 5; *orbicularis* p. 231 pl. x fig. 3; *terquemi* p. 230 pl. x fig. 4, MERCIER 95.

Echinocardium connectens sp. n. St. Helena, MORTENSEN Vidensk. Medd. naturh. Foren. Kjøb. 93 pp. 469–470 fig. 28.

†*Echinocorys gibbus* p. 4, *ovatus* p. 5, POLLAK 121.

†*Echinocyamus planus* sp. n. Eocene Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 32 pl. ii figs. 13–15; *E. lorioli*, Id. p. 31 pl. ii figs. 11–12.

Echinodiscus auritus, TORTONESE 149 fig. 1.

†*Echinodiscus ginauensis* sp. n. Lower Tertiary Persian Gulf, CLEGG Palaeont. indica 22 pp. 10–11 pl. i fig. 4.

†*Echinolampas angulatus* p. 14 figs. 4–5, *contii* p. 12 fig. 3, *lorioli* p. 11, CALLEGARI 21.—*E. omanensis* sp. n. Lower Tertiary Arabia, CLEGG Palaeont. indica 22 pp. 11–12 pl. i fig. 5; *E. sindensis* var. *hemispherica* p. 12, *jacquemonti* p. 26, Id.—*E. leymeriei* p. 54 pl. v figs. 4–7, *studerii* p. 53 fig. 10, pl. iv figs. 4–5, GOČEV 52.—*E. gignouxii* p. 35 pl. ii fig. 25, *valettei* p. 34 pl. ii figs. 23–24, spp. n. Eocene Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3.—*E. cherichirensis*, VENZO 159 p. 209 pl. xii figs. 1 a–c.

Echinometra lucunter, BOONE 17 p. 139 pls. xc–xci.

†*Echinotiara bruni*, MERCIER 95 p. 195 pl. vi fig. 4.

Ellipsechinus decaryi, lobatus, matheyi, oblongus, LAMBERT 82 pp. 46–47.

†*Eodiadema collenoti*, MORTENSEN 101 p. 436 figs. 3–4.

†*Eolampas* aff. *pusillus*, GOČEV 52 p. 48 pl. vii figs. 3–7.

†*Epiaster besairiei* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 18 pl. iii fig. 4.—*E. whitei*, SMISER 142 p. 159 pl. xxii figs. 3–12.

Euclidaris thouarsii p. 126 pls. lxxx–lxxxii, *tribuloides* p. 127 pl. lxxxii, BOONE 17.

†*Eurhodia theillardi*, LAMBERT 82 p. 34 pl. ii figs. 20–22.

†*Gauthieria menuthiae*, LAMBERT 82 p. 14 fig. 1.

†*Gomphechinus collignoni* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 15 pl. ii figs. 1–3.

†*Goniopygus lemoinei* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 16 pl. ii figs. 14–16.—*G. zitteli*, SMISER 142 p. 146 pl. xx figs. 1–4.

†*Gymnocidaris lamberti* sp. n. p. 162 pl. iii figs. 8 a–c, *pustulosa* var. *nuda* var. n. p. 161 pl. iii fig. 7, Jurassic France, MERCIER Mém. Soc. linn. Normandie Géol. 2 1932; *G. pustulosa* p. 72 figs. iv–v, pl. i fig. 1, p. 160 pl. iii fig. 6, Id.

†*Hemiaster zululandensis*, BESAIRIE 12 p. 47 pl. v fig. 6.—*H. canavarii* p. 22 fig. 12, *coranguinum* p. 21 fig. 14, CALLEGARI 21.—*H. besairiei* p. 22, *hawkinsi* p. 22 pl. iv fig. 19, *integer* p. 21 pl. iii figs. 5–6, *mutabilis* p. 20 pl. iii figs. 7–8, *narindensis* p. 24 fig. 2, *pseudanticus* p. 21 pl. ii figs. 27–28, spp. n. Cretaceous Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3; *H. sp.*, Id. p. 19 pl. ii fig. 29.—*H. calvini*, SMISER 142 p. 159 pl. xxii figs. 13–17.—*H. (Mecaster) gabrielis*, SHALEM 138 p. 22 pl. ii figs. 2a–e.

†*Hemicidarid lucienis oolithicus* subsp. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie géol. 2 1932 p. 120 fig. xix, p. 166 pl. iv figs. 6a–b; *H. bravenderi* p. 170 fig. xxiv, pl. v fig. 2; *grimaultensis* p. 169 pl. v fig. 1; *icavensis* p. 94 fig. xi 10–11, p. 117 fig. xviii 8–9, p. 171 pl. v fig. 3; *lucienis* p. 94 fig. xi 1–9, p. 117 fig. xviii 1–7, p. 135 fig. xxxiii 1, 4–5, with vars. *lucienis* pl. i fig. 2 pl. iii fig. 9, *conicus* pl. iv fig. 7, and *langrunensis* p. 167 pl. i fig. 3, pl. iv figs. 3, 5; *mondegoensis* p. 118 fig. xviii 10, Id.—*H. intermedia*, MORTENSEN 101 p. 433.

†*Heteraster oblongus*, BONČEV 16 p. 124 pl. i fig. 8.—*H. texanus*, SMISER 142 p. 156 pl. xxi figs. 3–6.

†*Holaster vanhoepeni*, BESAIRIE 12 p. 47 pl. v fig. 5.—*H. simplex*, SMISER 142 p. 152 pl. xx figs. 14–19.

†*Holcopneustes narindensis* sp. n. Cretaceous Madagascar p. 24 pl. iv figs. 8–10, *obtritus* sp. n. Eocene Madagascar p. 40 pl. iv fig. 11, LAMBERT Ann. géol. serv. mines Madagascar 3.

†*Holactypus* p. 21 with *H. arenatus* p. 25, *corallinus* p. 26, *depressus* p. 23, BEULEN 13.—*H. khamirensis* sp. n. Cretaceous Persia, CLEGG Palaeont. indica 22 pp. 6–7 fig. 1, pl. i fig. 1.—*H. depressus* p. 102 fig. xiv, p. 214 pl. vii fig. 11; *hemisphaericus* p. 215 fig. xxx, pl. vii fig. 13; *sarthacensis* p. 216 pl. vii fig. 12; MERCIER 95.—*H. castilloi* p. 148 pl. xx fig. 5, *limitis* p. 147 pl. xx figs. 6–9, SMISER 142.

†*Hyboclypeus gibberulus* p. 219 pl. viii fig. 2 and var. *sandalina* pl. viii fig. 3, MERCIER 95.

Laganum depressum, TORTONESE 149 figs. 3–4.

†*Laganum dalli*, COLE & PONTON 31 p. 23 fig. 1.—*L. dickersoni* pp. 302–303 pl. ii figs. 1–9, *equaeptala* pp. 303–304 pl. ii figs. 10–12, spp. n. Pliocene? Philippine Islands, ISRAELSKY Philipp. J. Sci. Manila 50; cf. *decagonale*, Id. p. 304 pl. i fig. 5.

†*Leiocardis tripolitana* sp. n. Cretaceous N. Africa, CHECCHIA-RISPOLI Mem. Soc. geol. Ital. Rome 1 pp. 3–4 fig. 4, pl. i figs. 1–4, pl. ii figs. 1–3.—*L. rolhieri* pp. 4–6 pl. i figs. 4, 8, 10; *tobleri* pp. 2–4 pl. i figs. 1–3, 6, 7, 11 spp. n. Jurassic Switzerland, JEANNET Abh. Schweiz. paläont. Ges. 53; *L. mortenseni* sp. n. Eocene Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 30 pl. i figs. 18–21.—*L. stefaninii* sp. n. Cretaceous Palestine, SHALEM Riv. ital. Palaeont. Pavia 39 pp. 19–22 pl. ii figs. 1a–d.—*L. hemigranosus*, SMISER 142 p. 133 pl. xvii figs. 4–7.

†*Linopneustes canavarii*, CALLEGARI 21 p. 23 figs. 15–16.

†*Linthia arabica* sp. n. Eocene Arabia, CLEGG Palaeont. indica 22 pp. 16–17 pl. ii figs. 1–2.—*L. bulgarica* sp. n. Eocene Bulgaria, GOČEV Z. Bulgar. geol. Ges. Sofia 5 pp. 56–58 figs. 12–14, pl. v fig. 1, pl. vi fig. 1; *ybergensis* p. 55 fig. 11, pl. v fig. 8, Id.—*L. gibba* sp. n. Eocene Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 41 fig. 7; *L. sindensis*, Id. p. 26 pl. iv fig. 16.

†*Loriolia inaequalis bathonica* var. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie géol. 2 1932 p. 183 pl. v figs. 13 a–b; *L. inaequalis inaequalis*, Id. p. 122 fig. xx 11–12, p. 183 pl. v fig. 12.—*L. ornata* p. 136 pl. xvii figs. 15–18, *texana* p. 134 pl. xvii figs. 10–14, SMISER 142.

†*Lovenia elongata* var., CLEGG 30 p. 33 pl. iii figs. 8–9.

Lytechinus variegatus, BOONE 17 p. 131 pl. lxxxv.

†*Macraster elegans*?, SMISER 142 p. 158 pl. xxi figs. 12–16.

†*Magnosia jacobii* sp. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie géol. 2 1932 pp. 207–208 pl. vii fig. 8.

†*Maretia* sp., PIJPER 120 p. 91 pl. i figs. 13–15.

†*Mariania marmorae*, CALLEGARI 21 p. 19 fig. 13.

Mellita quinquesperforata, TORTONESE 149 fig. 2.

†*Menopygus guerangeri*, MERCIER 95 p. 217 pl. vii fig. 1.

Meoma ventricosa, BOONE 17 p. 149 pls. xcv-xcvi.

†*Mepygurus depressus* p. 235 fig. xxxiii, pl. x fig. 9, pl. xi fig. 2; *fungiformis* p. 234 pl. x fig. 8, pl. xi fig. 1; *marmonti* p. 137 fig. xxiii 11, p. 236 pl. xi fig. 3, MERCIER 95.

†*Micraster fastigatus*, LAMBERT 81.

†*Miocidaris (Serpianotiaris) hescheleri* sp. n. Trias Switzerland, JEANNET Abh. schweiz. paläont. Ges. 53 pp. 1-7 figs. 1-2, pl. xxx figs. 1-13.—*M. hescheleri*, JEANNET 70.

Moiria atropus, BOONE 17 p. 147 pl. xciv.

†*Moiria adamthi* sp. n. Miocene Persian Gulf, CLEGG Palaeont. indica 22 pp. 27-29 pl. iii figs. 4-5.—*M. sp.*, PIJERS 120 p. 94 pl. i figs. 16-17.

†*Mokotibaster* gen. n. p. 17 for type *M. hourqi* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 18 pl. iii figs. 1-3.

†*Narindechinus* gen. n. with type *N. checcchiai* sp. n. Eocene Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 31 fig. 3, pl. i figs. 29-30.

†*Nucleolites scutatus*, CORROY 33 p. 209 pl. xxvi fig. 7.—*N. bakalovi* sp. n. Eocene Bulgaria, GOČEV Z. Bulgar. geol. Ges. Sofia 5 p. 48 pl. vii figs. 8-12.

†*Oligopygus putnami* sp. n. Eocene Mexico, ISRAELSKY Trans. San Diego Soc. Nat. Hist. 7 pp. 275-276 pl. xviii figs. 1-4.

†*Ornitaster cordiformis*, BONČEV 16 p. 142 pl. ii figs. 4 a-c.

†*Orthopsis sanfilippoi* sp. n. Cretaceous N. Africa, CHECCHIA-RISPOLI Mem. Soc. geol. Ital. Rome 1 pp. 6-11 figs. 2-4, pl. i figs. 5-15.

†Cf. *Palaechinus* sp., SCHMIDT 136 p. 307 pl. xviii fig. 4.

Paraster erythraeus sp. n. Red Sea, TORTONESE Boll. Mus. Zool. Anat. comp. Torino 42 19 1932 pp. 1-6 figs. 1-7.

†*Pauropygus ovumserpentis*, PIJERS 120 p. 87 pl. i figs. 7-8.

†*Periaster inconstans* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 25 pl. iv fig. 15.

†*Pericosmus capellinii* p. 18 figs. 10-11, *edwardsii* p. 16 fig. 9, CALLEGARI 21.—*P. schencki* sp. n. Pliocene? Philippine Islands, ISRAELSKY Philipp. J. Sci. Manila 50 p. 306 pl. iii figs. 1-2, pl. iv fig. 1.—*P. clarki* sp. n. Eocene Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 41 pl. iii fig. 14.—*P. gardensis* sp. n. Oligocene Italy, VENZO Boll. Soc. geol. ital. 52 pp. 210-211 pl. xii fig. 2.

†*Peroneila merrilli* p. 304 pl. ii figs. 17-19, *ragayana* p. 305 pl. ii figs. 13-16, spp. n. Pliocene? Philippine Islands, ISRAELSKY Philipp. J. Sci. Manila 50.

†*Phymosoma paronai* sp. n. Cretaceous N. Africa, CHECCHIA-RISPOLI Mem. Soc. geol. Ital. Rome 1 pp. 11-14 figs. 5-7, pl. ii fig. 4-7.—*P. regulare*, LAMBERT 82 p. 15 pl. i fig. 28.—*P. texanum*, SMISER 142 p. 144 pl. xix figs. 7-11.

†*Physaster abichi*, BONČEV 16 p. 141 pl. ii figs. 3 a-c.

†*Plegiocidaris babeau* var. *granulosa* var. n. Jurassic France, MERCIER Mém. Soc. Linn. Normandie Géol. 2 1932 p. 149 pl. ii fig. 5; *P. babeau* p. 110 fig. xvi 1-5, p. 147 pl. ii fig. 4; *bathonica* p. 110 fig. xvi 6-9, p. 146 pl. ii fig. 3; *blainvilliei* p. 147 pl. ii fig. 6, *briconensis* p. 151 pl. ii fig. 8, *davousti* p. 153 pl. ii fig. 9, *desori* p. 152, *microstoma* p. 150 pl. ii fig. 7, *saemanni* p. 113 fig. xvi 10, p. 144 pl. ii fig. 1 and var. *langrunensis* p. 145 pl. ii fig. 2, Id.

†*Plesiopatagus hourqi* sp. n. Eocene Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 38 pl. iv fig. 22.

†*Pliolampas dilatatus* sp. n. Miocene Italy, CALLEGARI Mem. Inst. geol. Univ. Padova 9 1930 pp. 10-11 figs. 17, 17a.

†*Polycyphus corallinus* p. 205 pl. vii fig. 6; *normannus* p. 89, p. 101 fig. xiii 12, p. 124 fig. xxi 16, p. 136 fig. xxiii 10, p. 204 pl. vii fig. 5; *textilis* p. 101 fig. xiii 13, p. 206 pl. vii fig. 7; MERCIER 95.

†*Polysalenia* gen. n. p. 490 with type *P. notabilis* sp. n. Cretaceous Sweden, MORTENSEN Geol. Fören. Stockh. Förh.

54 pp. 491-494 figs. 17-22, pl. iv figs. 1-3; *P. cottaldi* sp. n. Cretaceous Sweden, Id. pp. 494-496 figs. 23-24, pl. iv figs. 11-13.

†*Porocidaris schmideli*, LAMBERT 82 p. 28 pl. i figs. 16-17. [Radiole.]

†*Porosoma pulchrum*, GOČEV 52 p. 43 pl. v fig. 9.

†*Prenaster oviformis*, CLEGG 30 p. 15. —*P. škorpili* sp. n. Eocene Bulgaria, GOČEV Z. Bulgar. geol. Ges. Sofia 5 pp. 58-59 pl. ii fig. 1, pl. iv fig. 6, pl. vii fig. 19; *alpinus*, Id. p. 58 pl. v figs. 2-3. —*P. alpinus*, LAMBERT 82 p. 41 pl. iv fig. 20. —*P. jeanneti* sp. n. Eocene Dutch West Indies, PIJPPERS Pub. Geog. Min.-Geol. Inst. Rijks Utrecht Phys. Geol. 8 pp. 93-94 fig. 156, pl. i figs. 9-12.

†*Procassidulus clericii* sp. n. Cretaceous N. Africa, CHECCHIA-RISPOLI Mem. Soc. geol. Ital. Rome 1 pp. 18-21 fig. 8, pl. i fig. 16.

†*Prometalia besairiei* sp. n. Eocene Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 39 fig. 6.

†*Propedina davousti* p. 193 pl. vi fig. 2, *gigas* p. 191 pl. vi fig. 3, MERCIER 95.

†*Protocidaris* subgen. n. vide *Cidaris*.

Psammechinus miliaris, MERCIER 95 p. 61. —*P. miliaris*, MORTENSEN 101 p. 431 fig. 1b.

†*Psephochinus newtoni* sp. n. Jurassic Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 10. —*P. mazeri* sp. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie géol. 2 1932 p. 201 pl. vii fig. 2, p. 101 fig. xiii 11; *microcyphus* p. 199 pl. vii fig. 1; *moreirei* p. 87 pl. i figs. 6 a-j, p. 101 fig. xiii 6-9, p. 124 fig. xxi 11-14; *peroni* p. 202 pl. vii fig. 4; *schlumbergeri* p. 101 fig. xiii 10, p. 200 pl. vii fig. 3, Id.

†*Pseudocidaris drogiaca drogiaca* p. 132 fig. xxii 1-8, p. 157 pl. i fig. 4; *minor* p. 135 fig. xxiii 3, p. 158 pl. iii fig. 5; MERCIER 95.

†*Pseudodiadema pseudodiadema*, MORTENSEN 101 p. 434 fig. 2.

†*Pseudoholaster androaviensis* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 17 pl. ii fig. 26.

†*Pseudopedina bakeri*, MERCIER 95.

†*Pygaster* p. 9 with *semisulcatus* p. 14, *subtilis* p. 18; *P. (Plesiochinus)* p. 11, BEURLIN 13. —*P. joleaudi* sp. n. Jurassic Madagascar, Besairie & Lambert in LAMBERT Ann. géol. serv. mines Madagascar 3 p. 10 pl. ii fig. 7. —*P. laganoides ranvillensis* subsp. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie géol. 2 1932 p. 213; *P. laganoides laganoides* p. 91 pl. i figs. 8 a-b, p. 212 pl. vii fig. 10, *P. trigeri* p. 90 pl. i figs. 7 a-c, p. 209 fig. xxix pl. vii fig. 9, Id.

†*Pygorhytis ovalis* p. 238 pl. xi fig. 5, *ringens* p. 237 pl. xi fig. 4, *P. (Pygomalus) avellana* p. 239 fig. xxxiv, pl. xi fig. 6, MERCIER 95.

†*Pygurus (Mepygurus) haussmanni* p. 73 fig. 13c; *P. (Pygurus) blumenbachi* p. 79 figs. 15 a-b, *jurensis* p. 83 fig. 16, *pentagonalis* p. 77 fig. 14, *royeri* p. 82; BEURLIN 13.

†*Pyrina arabica* sp. n. Cretaceous Arabia, CLEGG Palaeont. indica 22 p. 8 pl. i fig. 2.

†*Radiolus lineola*, DESIO 39 p. 18 pl. i fig. 5.

†*Rhabdocidaris copeoides* p. 204 pl. xxvi figs. 1-3, *sarthacensis* p. 205 pl. xxvii fig. 1, *thurmanni* p. 205 pl. xxvi figs. 4-6, CORROY 33 [Radioles]. —*R. desori* p. 5 fig. 3, *orbignyi* p. 3 fig. 2, *princeps* p. 2 fig. 1, JEANNET 66. —*R. bigoti* p. 144 pl. iii fig. 1, *copeoides* p. 155 pl. iii fig. 2, *R. sp. ?* p. 156 pl. iii fig. 3, MERCIER 95.

†*Rhyncholampas anceps* sp. n. Eocene Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 33 pl. ii figs. 17-19.

†*Salenia persica* sp. n. Eocene Persia, CLEGG Palaeont. indica 22 pp. 8-10 pl. i fig. 3. —*S. trigonopyga* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 pp. 13-14 pl. i figs. 25-27. —*S. areolata* p. 477 figs. 2-9, pl. v figs. 6-12; *lundgreni* p. 482 pl. v figs. 3-5, MORTENSEN 103. —*S. texana*, SMISER 142 p. 141 pl. xix figs. 1-4.

†*Scutella pseudo-subrotundaeformis* nom. n. for *S. subrotundaeformis* Oppenheim non Schaueroth p. 208, *scurellensis* sp. n. p. 209, Oligocene Italy, VENZO Boll. Soc. geol. ital. 52. —*S. andersoni* p. 177 pl. iv figs. 1-2, *fairbanksi* p. 177

pl. iv figs. 3-6, *fairbanksi santanensis* p. 178 pl. iv fig. 7; *S. norrisi* p. 178 pl. vi fig. 2; *vaquerosensis* p. 178 pl. v fig. 5, pl. vi fig. 1, LOEL & COREY 89.

†*Scutellina balcanica* p. 47 pl. vii figs. 13-17, *conica* p. 48 pl. vii fig. 18 a-d, spp. n. Eocene Bulgaria, GOČEV Z. Bulgar. geol. Ges. Sofia 5.

†*Scutaster vaquerosensis* sp. n. pp. 179-180 pl. v figs. 1 a-b, 3; with var. *kewi* var. n. p. 180 pl. v fig. 4, Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 1932.

†*Schizaster persica* sp. n. Lower Tertiary Persia, CLEGG Palaeont. indica 22 pp. 13-14 pl. i figs. 6-7.—*S. pratti* sp. n. Pliocene? Philippine Islands, ISRAELSKY Philipp. J. Sci. Manila 50 pp. 305-306 pl. iv figs. 2-3, pl. v figs. 1-4.—*S. eopneustes* p. 42 pl. iii fig. 15, *leprosorium* p. 42 fig. 8, *narindensis* p. 43 pl. iv fig. 23 spp. n. Eocene Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3.—*S. gerthi* sp. n. Eocene Dutch West Indies, PIJPER Pub. Geog. Min.-Geol. Inst. Rijks. Utrecht Phys. Geol. 8 pp. 96-97 fig. 157, pl. i fig. 19, pl. ii figs. 10-12; *S. cf. subcylindricus*, Id. p. 95 pl. ii figs. 20-21.—*S.?* n. sp., LOEL & COREY 89 p. 181 pl. v fig. 2.

†*Schizobrissus* sp., LAMBERT 82 p. 39 figs. 4-5.

†*Spatangus subinermis*, SERRA 137 p. 158 figs. 1-2, pl. x figs. 1-2.

Sphaerechinus granularis, BOONE 17 p. 137 fig. 4 and pl. lxxxix.

†*Sphaerotiaria stricta*, CORROY 33 p. 206 pl. xxvii figs. 5-7.

†*Stigmatopygus*, RAO 124.

†*Stomechinus polyporus nanus* subsp. n. Jurassic France, MERCIER Mém. Soc. linn. Normandie géol. 2 1932 p. 198 pl. vi fig. 6; *S. bigranularis* p. 125 fig. xxi 7-10; *polyporus* p. 100 fig. xiii 1-5, p. 124 fig. xxi 1-5, p. 137 fig. xxiii 9, p. 196 pl. vi fig. 5; *serratus* p. 198 pl. vi fig. 7; Id.

Strongylocentrotus gibbosus, BOONE 17 p. 135 pls. lxxxvii-lxxxviii.

†*Temnopleurus latidunensis* sp. n. Miocene Persian Gulf pp. 18-19 pl. ii fig. 5, *persica* sp. n. Miocene Persia pp. 21-23 fig. 2, pl. ii fig. 7, CLEGG Palaeont. indica 22; *T. cf. reynaudi* p. 19 pl. ii fig. 4, aff. *torematicus* p. 20 pl. ii fig. 6, Id.

†*Tetragramma besairiei* sp. n. Cretaceous Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3 p. 13 pl. i figs. 23-24.—*T. streeruwitzi*, SMISER 142 p. 137 pl. xviii fig. 3-5.

†*Triadocidaris liagora*, DESIO 39 p. 16 pl. i fig. 4.

Tripneustes esculentus, BOONE 17 p. 132 pl. lxxxvi.

†*Tripylus antonibensis* p. 28 pl. iv figs. 12-14, *pseudoviviparus* p. 27 pl. iv figs. 1-7, spp. n. Cretaceous Madagascar, LAMBERT Ann. géol. serv. mines Madagascar 3.

†*Trisalenia loveni*, MORTENSEN 103 p. 485 figs. 10-16, pl. iv figs. 4-10, pl. v figs. 13-24.

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†*Xenura* gen. n. for type *X. koboldi* sp. n. Carboniferous Germany, Schöndorf in KOBOLD Jahrb. preuss geol. Ld. Anst. Berlin 53 pp. 507-508 pl. xxiii fig. 49.

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†*Aidemocrinus* gen. n. for type *A. odiosus* sp. n. Carboniferous U.S.A., WELLER Rept. Invest. Illinois State Geol. Surv. 21 1930 pp. 28-29 fig. 3, pl. ii figs. 5 a-b.

†*Allagecrinus* discussion and diagnosis; *A. austinii* p. 205 figs. 13-15, pl. xiv figs. 4-8, 10; *biplex* p. 206 pl. xiv figs. 13-14; *carpelensis* p. 206 pl. xiv figs. 9, 12; WRIGHT 167.

†*Amphipsalidocrinus* gen. n. for type *A. scissurus* sp. n. Carboniferous U.S.A., WELLER Rept. Invest. Illinois State Geol. Surv. 21 1930 pp. 33-35 fig. 6, pl. ii figs. 8 a-c.

Antedon adriatica, BOONE 17 p. 69 pl. xxvi.

†*Antedon chateleti* sp. n. Cretaceous France, VALLETTE Bull. Soc. Hist. nat. Toulouse 66 pp. 393-394 figs. 1-4.

†*Ascarum* gen. n. for type *A. montanum* sp. n. Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930 p. 42 pl. xv fig. 7.

†*Bornium* gen. n. with type *B. vestutum* sp. n. Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930 p. 35 pl. xiv figs. 1-3; *B. vetustum* var. *inane* var. n., Id. p. 36 pl. xiii fig. 4.

†*Carlopsocrinus* gen. n. for type *C. bullatus* sp. n. Carboniferous Scotland, WRIGHT Geol. Mag. London 70 pp. 198 figs. 9-12, pl. xiii figs. 4-6.

†*Catillocrinus scoticus* sp. n. Carboniferous Scotland, WRIGHT Geol. Mag. London 70 pp. 194-198 figs. 1-2, 4-8, pl. xiii figs. 1-3, 7-8.

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Crinometra transversa sp. n. St. Helena, GISLÉN Vidensk. Medd. naturh. Foren. Kjøb. 93 pp. 478-483 fig. 5, pl. xxiii figs. 1-4.

†*Crisantum* gen. n. with type *C. stevensoni* sp. n. Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930 p. 36 pl. xiii figs. 7-10.

Cyllometra prashadi sp. n. Indian Ocean, CLARK Rec. Ind. Mus. Calcutta 34 1932 pp. 558-559 pl. xix figs. 5-7.

†*Dischostreblocrinus* gen. n. for type *D. scrobiculus* sp. n. Carboniferous U.S.A., WELLER Rept. Invest. Illinois State Geol. Surv. 21 1930 p. 37 fig. 8, pl. ii figs. 9 a-d.

†*Drepanocrinus* a synonym of *Roveacrinus*, SIEVERTS 140.—*D.*, SIEVERTS 141.

†*Edriocrinus sacculus*, EHRENBERG 44.

†*Encrinites apiosus* p. 37, *disculus* p. 37 pl. xiii figs. 24-25, *nirvus* p. 38 pl. xiii figs. 17-18, *nudus* p. 38 pl. xiii figs. 22-23, *patiens* p. 38 pl. xiii figs. 14-15, *perminutus* p. 37 pl. xiii fig. 13, *praedominans* p. 36 pl. xiii figs. 1-4 with var. *alternatum* p. 37 pl. xiii fig. 5, *regularis* p. 37 pl. xiii fig. 19, *tolomeus* p. 37 pl. xiii fig. 26, spp. & var. n. Permian Sicily, GREGORIO Ann. Géol. Paléont. Palerme 52 1930.

†*Erisocrinus araxensis* sp. n. Permian Russia, JAKOVLEV Bull. Acad. Leningrad 1933 pp. 975-976 pl. i figs. 3-5.

Eudiocrinus philenor sp. n. Indian Ocean, CLARK Rec. Ind. Mus. Calcutta 34 1932 pp. 554-556 pl. xix figs. 1-4.

†*Eugeniocrinites quaesitus* sp. n. Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930 p. 36 pl. xiii figs. 20-21.

†*Forbesiocrinus*? *siculus* sp. n. Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930 p. 35 pl. xiii fig. 16.

†*Hemicrinus*? *perdubius* sp. n. Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930 p. 41 pl. xv figs. 20-21.

†*Hybochilocrinus* gen. n. p. 12 for type *H. americanus* (Rowley) p. 13 fig. 1, pl. i figs. 1 a-c, Carboniferous U.S.A., WELLER Rept. Invest. Illinois State Geol. Surv. 21 1930.

†*Idromecrinus* gen. n. for type *I. genistus* sp. n. p. 41 pl. xv figs. 12-13 (with var. *laratus* var. n. p. 41 pl. xv figs. 14-17) and *I. floreatus* sp. n. p. 41 pl. xv figs. 18-19, Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930.

†*Imperatoria* gen. n. for type *I. marconii* sp. n. Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930 p. 39 pl. xiv figs. 9-16; *I. ? anomala* sp. n. Permian Italy, Id. p. 40 pl. xiv figs. 17-18.

†*Isocrinus tyrolensis*, DESIO 39 p. 19 pl. i fig. 6.

†*Kallimorphocrinus* gen. n. p. 15 for type *K. astrus* sp. n. var. *typicus* var. n. Carboniferous U.S.A., WELLER Rept. Invest. Illinois State Geol. Surv. 21 1930 pp. 16-18 fig. 2, pl. i figs. 2 a-c; *astrus intermedius* var. n. p. 18 pl. i figs. 3 a-c, *pyramidalis* var. n. p. 18 pl. i figs. 4 a-c; *K. expansus* p. 27 pl. i figs. 10a-b, *illinoisensis* p. 25 pl. ii figs. 2a-3b, *indianensis* pp. 20-21 pl. i figs. 9 a-b, *infacetus* p. 22 pl. ii figs. 4 a-b, *knighti* p. 26 pl. i figs. 7 a-b, *kilius* p. 19 pl. i figs. 8 a-b, *piasaensis* p. 18 pl. i figs. 5 a-b, *pocillus* p. 24 pl. ii figs. 1 a-d, *vanpelti* p. 21 pl. i figs. 6 a-b, spp. n. Carboniferous U.S.A., Id.—*Kallimorphocrinus* discussion and diagnosis; *K. scoticus* var. *contractus* var. n. Carboniferous Scotland, WRIGHT Geol. Mag. London 70 p. 206 pl. xiv fig. 1; *K. scoticus* p. 206 pl. xiv fig. 2, *elongatus* p. 206 pl. xiv fig. 3, Id.

†*Lageniocrinus cassidus* sp. n. Carboniferous U.S.A., WELLER Rep. Invest. Illinois State Geol. Surv. 21 1930 p. 32 fig. 5, pl. ii figs. 6 a-b.

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†*Leseus* gen. n. for type *L. palazzensis* sp. n. p. 38 pl. xiv figs. 5-6 (with var. *inaequalis* var. n. p. 39 pl. xiv fig. 7) Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930.

†*Mirmus* gen. n. for type *M. ruptus* sp. n. Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930 p. 40 pl. xv figs. 5-6.

Monachocrinus incrassatus sp. n. St. Helena, GISLÉN Vidensk. Medd. naturh. Foren. Kjøb. 93 pp. 483-485 figs. 6-9, pl. xxiii figs. 5-7.

Neocomatella pulchella, BOONE 17 p. 68 pl. xxv.

†*Pentacrinus* cf. *sibteres*, SANDIDGE 133 p. 183 pl. i fig. 19.

†*Platycrinus austrianus*, SCHMIDT 136 p. 332 pl. xxii figs. 6-7.

Promachocrinus kerguelensis, BERNASCONI 9 p. 86 fig.

†*Rhodocrinus* sp., SCHMIDT 136 p. 332 pl. xxii figs. 8-12.

†*Rimpia* gen. n. for type *R. osiensis* sp. n. Permian Italy, GREGORIO Ann. Géol. Paléont. Palerme 52 1930 p. 40 pl. xv figs. 3-4.

†*Roveacrinus westfalicus* sp. n. Cretaceous Germany, SIEVERTS Chl. Min. Geol. Paläont. Stuttgart B 1933 pp. 56-58 figs. 1-2; *R. alatus* p. 55, *sessilis* p. 58, Id.

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†*Syndetocrinus* gen. n. for type *S. dartae* sp. n. pp. 347-351 figs. 1-4; *S. northropi* sp. n. pp. 351-354 figs. 5-8, Silurian Canada, KIRK Amer. J. Sci. Newhaven (5) 26.

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†*Lepidocoleus ketleyanus*, WITHERS 166 p. 162 pl. iv fig. 4.

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†*Echinospherites* with *Larites* subg. n. for type *E. (L.) gemmellaroi* sp. n. Permian Sicily, GREGORIO Ann. Géol. Paléont. Palerme 52 1930 p. 35 pl. xv figs. 1-2.

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†*Larites* subgen. n. vide *Echinospherites*.

†*Palaeocystites bessarabianum* sp. n. Silurian Roumania, VÂSCĂUTANU Ann. Inst. geol. Roman. București 15 1931 pp. 564-565, 654-655, fig. 24, pl. xi figs. 27-28.

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VI. VERMES

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tortoise, *Heosemys grandis*, Kedah, Malaya, BAYLIS Ann. Mag. Nat. Hist. London (10) 11 1933 pp. 628-632 figs. 12-15.—*C. anabantis* in climbing perch, *Anabas testudineus*, p. 182 figs. 5-9, *ophicephali* in serpent-head, *Ophicephalus striatus*, p. 183 figs. 10-14, *trichogasterae* in intestine of *Trichogaster trichopterus* p. 184 figs. 15-17 spp. n. Siam, PEARSE J. Siam. Soc. 9 1933.

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Dipetalonema sunci sp. n. in inter-scapular subcutaneous tissue of *Suncus caeruleus*, Tonkin, SANDGROUND Z. Parasitenk. Berlin 5 1933 pp. 581-582 fig. 33.—*D. travassosi* sp. n. in peritoneal cavity of nutria, *Myocastor coipus*, ARTIGAS & PACHECO Rev. Biol. Hyg. S. Paulo 4 1933 pp. 23-27 4 figs.

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Dirofilaria macacae in *Macaca assamensis* var. *coolidgei*, *pagumae* in *Paguma larvata intrudens*, *minor* in *Felis bengalensis* spp. n. Annam, SANDGROUND Z. Parasitenk. Berlin 5 1933 pp. 575-579 figs. 28-30.—*D. repens* Raill. and Henry, 1911 syn. of *D. acutiuscula* (Molin, 1858) n. comb., CHITWOOD J. Parasit. Urbana 20 1933 p. 63.

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Gongylonema samani sp. n. in crop of fowl, *Gallus gallus dom.*, India, BHALLERAO Ind. J. Vet. Sc. Calcutta 3 1933 pp. 116-119 3 figs.—*G. microgubernaculum* sp. n. in bronchi and oesophagus

of *Silenus rhesus*, GEBAUER Z. Parasitenkunde Berlin 5 1933 pp. 730-733 figs. 8-10.—*G. verrucosum* (Giles) in hill goat, *Capra sibirica*, Muktesar, India, BHALLERAO Ind. J. Vet. Sc. Calcutta 3 1933 p. 165.—*G. neoplasticum* (Fib. & Ditlev.) in rats, Brazil, MEIRA Ann. Fac. Med. S. Paulo 7 1932 pp. 85-94 3 pls.

Habronema diesingi in gizzard of vulturine guinea fowl, *Acryllium vulturinum*, pp. 238-240 figs. 22-26, *magnilabiata* in Indian eagle, *Polioaetus plumbeus*, pp. 241-242 figs. 27-30, *asymmetrica* in *Circus micrurus* pp. 242-244 figs. 31-33, *casuarii* in *Casuaris bicarunculatus* pp. 244-245 figs. 34-36 spp. n., *euploacii* Maplestone pp. 246-247 fig. 37, *bulbosa* (Linst.) in *Pavo muticus* p. 247 figs. 38-39, Calcutta Zoo, MAPLESTONE Rec. Ind. Mus. Calcutta 34 1932.—*H. hamospiculatum* (Nev.-Lem.) in stomach of pangolin, *Manis javanica*, Indo-China, Hsü Peking Nat. Hist. Bull. 7 1932 pp. 109-111 figs. 13-15.—*H. incertum* (Smith, Fox & White) in proventriculus of Gambel quail, *Lophortyx gambeli*, Arizona, CRAM J. Parasit. Urbana 20 1933 p. 75.

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Lissonema striata in orbital cavity and nasal sinus of *Cynornis hyperythra*, *laevicutis* in conjunctival sac of *Cynornis banyumas whitei* spp. n. Indo-China, SANDGROUND Z. Parasitenk. Berlin 5 1933 pp. 562-563 fig. 18.

Litosoma chiropteroorum sp. n. in abdominal cavity of bat, *Miniopterus natalensis*, Pretoria, ORTLEFF Rep. Vet. Serv. Pretoria 18 1932 pp. 193-195 figs. 14-17.—*L. wite* sp. n. in sub-

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Odontospirura gen. n. Spiruridae, *cetiopenis* sp. n. in proventriculus and gizzard of *Rhea americana*, Nat. Zool. Park, Washington, WEHR Proc. U.S. Nat. Mus. Washington 82 1933 xvii 5 pp. 3 figs.

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Oswaldofilaria gen. n. Filarioidea, type *Filaria bacillaris* Molin in thoracic wall of *Caiman sclerops*, Brazil, TRAVASSOS Mem. Inst. Oswaldo Cruz 27 1933 pp. 159-161 figs. 1-6, C.R. Soc. Biol. Paris 113 1933 pp. 218-219 fig. 1.

Oxyspirura kaitingensis under nictitating membrane of *Lanius tigrinus* pp. 524-525 figs. 32-36, *peipingensis* in red-tailed thrush pp. 525-527 figs. 37-39, *tsingchengensis* in bird, *Microscelis leucocephalus* pp. 527-528 figs. 40-43, spp. n. China, Hsü Parasitol. Cambridge 24 1933.

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Physaloptera bedfordi sp. n. in stomach of *Rhinolophus zuluensis*, Pretoria, ORTLEPP Rep. Vet. Serv. Pretoria 13 1932 pp. 191-193 figs. 11-13.—*P. multiuteri* Canavan 1929 in spider monkey, *Ateles ater*, McCURE Zoologica New York 15 1933 pp. 44-45.—*P. spinicauda* sp. n. in stomach and duodenum of *Citellus tridecemlineatus* and *C. franklini*, Canada, McLEOD Canad. J. Res. Ottawa 9 1933 pp. 117-120 figs. 9-12.—*P. clausa* Rud. in hedgehog, *Erinaceus deabatus*, Nanking,

WU Sinensia Nanking 4 1933 pp. 54-55 figs. 8-10.

Physocephaloides gen. n. Arduenninae, *primus* sp. n. in intestine of *Hylobates hoolock*, Calcutta Zoo, MAPLESTONE Rec. Ind. Mus. Calcutta 34 1932 pp. 229-231 figs. 1-4.

Pingidae fam. n. of superf. Spirur-oidea, for type *Pingus* gen. n., Hsü Parasitol. Cambridge 24 1933 p. 518.

Pingus gen. n. of Pingidae, *sinensis* sp. n. in caecum of fish, *Ophiocephalus argus*, China, Hsü Parasitol. Cambridge 24 1933 pp. 519-520 figs. 15-20, 46.

Procamallanus kerri sp. n. in intestine of *Glossobobius giurus*, Siam, PEARSE J. Siam. Soc. 9 1933 p. 185 figs. 18-20.

Proleptus robustus (v. Ben.) in *Raja clavata* and *Mustelus laevis*, Plymouth, pp. 326-329 figs. 1-3, *australis* sp. n. in intestine of tiger-shark (? *Galeocerdo tigrinus*), Queensland, pp. 330-332 figs. 4, 5, BAYLIS Ann. Mag. Nat. Hist. London (10) 12 1933.—*P. anabantis* sp. n. in intestine of climbing perch, *Anabas testudineus*, Siam, PEARSE J. Siam. Soc. 9 1933 p. 187 figs. 25-27.

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Pseudocystidicola subg. n. of *Cystidicola*, type *skrjabini* sp. n. vide *Cystidicola*.

Quasithelazia gen. n. Schistorophinae, *tenuis* sp. n. in gizzard of kingfisher, *Ceryle smyrnensis*, Calcutta Zoo, MAPLESTONE Rec. Ind. Mus. Calcutta 34 1932 pp. 233-235 figs. 10-13.

Rhabdochona opienensis sp. n. in intestine of freshwater fish, *Oreinus sinensis*, Szechuan, China, Hsü Peking Nat. Hist. Bull. 8 1933 pp. 152-154 pl. ii figs. 7-12.

Rictularia affinis Jägersk. in intestine of jackal, *Thos adustus*, Rhodesia, SANDGROUND Bull. Mus. Comp. Zool. Harvard 75 1933 p. 292.—*R. citelli* sp. n. in stomach and duodenum of gophers, *Citellus tridecemlineatus* and *C. franklini*, Canada, McLEOD Canad. J. Res. Ottawa 9 1933 pp. 114-116 figs. 1-4.—*R. wheeleri* sp. n. in *Paguma larvata intrudens*, Tonkin, SANDGROUND Z. Parasitenk. Berlin 5 1933 pp. 573-575.

Rusguniella elongata (Rud.) in *Hydrochelidon nigra*, Russia, GILBERT Wiss. Mitt. Univ. Smolensk 6 1930 p. 101 figs. 2 i-iii.

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Serratospiculum turkestanicum Skrj. in body cavity of *Hypotriorchis aequalon*, China, LI Parasitology Cambridge 25 1933 p. 205 3 figs.

Setaria buzi sp. n. in peritoneal cavity of hill goat, *Capra sibirica*, Muktesar, India, BHALERAO Ind. J. Vet. Sc. Calcutta 3 1933 pp. 162-164 3 figs.—*S. labiato-papillosa* (Alles, 1838) in American bison, *Bison bison*, McCURE Zoologica New York 15 1933 pp. 45-46.—*S. congolensis* Raill. and Henry in peritoneal cavity of *Sus scrofa*, Annam, SANDGROUND Z. Parasitenk. Berlin 5 1933 pp. 578-580 figs. 31, 32.

Skrjabinura gen. n. of *Skrjabinuridae* fam. n., *spiralis* sp. n. in intestine of *Caprimulgus europaeus*, Russia, GNEDINA Ann. Parasitol. Paris 11 1933 pp. 180-184 4 figs.

Skrjabinuridae fam. n. of subord. *Spirurata*, for *Skrjabinura* gen. n., GNEDINA loc. cit.

Spinitectus indicus sp. n. in siluroid fishes, *Pseudotropius garua* and *Eutropiichthys vacha*, India, VERMA & AGARWALA Rec. Ind. Mus. Calcutta 34 1932 pp. 263-268 4 figs.—*S. inermis* (Zed.) in *Anguilla vulgaris*, Baltic, MARKOWSKI Arch. Hydrobiol. Suwalki 7 1933 pp. 44-45 fig. 27.

Spirocera sanguinolenta (Rud., 1819) syn. of *S. lupi* (Rud., 1809), CHITWOOD J. Parasit. Urbana 20 1933 p. 69.

Spiropterina inflata Linst., *africana* Linst., *coronata* Ben., *elegans* Oerley referred to *Proleptus*, BAYLIS Ann. Mag. Nat. Hist. London (10) 12 1933 pp. 326-332.

Spirura infundibuliformis sp. n. in stomach and duodenum of *Citellus tridecemlineatus* and *C. richardsoni*, Canada, MCLEOD Canad. J. Res. Ottawa 9 1933 pp. 116-117 figs. 5-8.

Spirurida ord. n. to comprise subord. *Spirurata*, CHITWOOD J. Parasit. Urbana 20 1933 p. 131.

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Spiruroides gen. n. *Spiruridae*, *erinacei* sp. n. in stomach of hedgehog, *Erinaceus*, *europaeus*, Scotland, CAMERON & PARNELL Proc. Phys. Soc. Edinburgh 22 1933 pp. 149-151 figs. 16-18.

Stellocaronema gen. n. *Ancyracanthidae*, *skrijabini* sp. n. in *Hydrochelidon nigra* and *Vanellus vanellus*, Russia, GILBERT Wiss. Mitt. Univ. Smolensk 6 1930 pp. 102-106 fig. ii 5-9.

Stephanofilaria gen. n. *Setariinae* (*Filariidae*), *Dedoesi* sp. n. in the skin of cattle, East Indies, IHLE & IHLE-LANDENBERG Ned. Ind. Blad. Diergeneesk. 45 1933 pp. 279-284 7 figs.

Streptopharagus pigmentatus (Linst.) in small intestine of *Hylobates leucogenys* and *Macaca* sp., Tonkin, SANDGROUND Z. Parasitenk. Berlin 5 1933 pp. 570-573 fig. 27.

Tetrameres paradisea sp. n. in proventriculus of Stanley crane, *Tetraptyx paradisea*, South Africa, ORTLEPP Rep. Vet. Serv. Pretoria 18 1932 pp. 177-182 8 figs.—*T. pattersoni* sp. n. in stomach glands of bobwhite quail (*Colinus virginianus*), N. America, CRAM J. Parasit. Urbana 19 1933 p. 245.—*T. crami* sp. n. in proventriculus of *Anas boschas dom.*, Canada, SWALES Canad. J. Res. Ottawa 8 1933 pp. 334-336 1 pl.

Thalassonema gen. n. of uncertain position, *ophioctinis* sp. n. in perivisceral cavity of brittle-star, *Ophiocten amittinum*, south-east coast of Cape Colony, WARD J. Parasit. Urbana 19 1933 pp. 263-266 1 text-fig. 1 pl.

Thelazia dentifera in conjunctiva of *Picus canus hessei*, Tonkin, p. 544 figs. 1-3, *annamensis* in *Polyplectron bimaculeatum* and *Cynornis bangumas* p. 545 fig. 4, *longicauda* in *Glaucidium cuculoides* p. 546 fig. 5; spp. n. Indo-China, SANDGROUND Z. Parasitenk. Berlin 5 1933.—*T. chungkingensis* sp. n. under nictitating membrane of hair-crested drongo, *Chibia hottentota brevisrostris*, China, HSÜ Parasitol. Cambridge 24 1933 pp. 522-524 figs. 28-31, 44.—*T. callipaeda* Raill. & Henry in man and dog, HSÜ-HAI-FAN Arch. Schiffs. TropenHyg. Leipzig 37 1933 pp. 363-369 3 figs.

Thelazo gen. n. *Thelaziidae*, *glossogobii* in intestine of *Glossogobius giurus*, Siam, PEARSE J. Siam Soc. 9 1933 p. 186 figs. 21-24.

Thubunaea grayiacola in *Grayia tholloni* and *Bitis arietans*, Tanganyika, fig. 14, *agamae* in *Agama hispida*, Mozambique, figs. 11-13 spp. n., SANDGROUND Bull. Mus. Comp. Zool. Harvard 75 1933 pp. 288-292.

Vestibuloseitaria Vogel & Gabaldon 1932 syn. of *Litomosoides* Chandler 1932, *L. sigmodontis* Chandler 1931 syn. of *L. patersoni* (Mazza, 1928), CHITWOOD J. Parasit. Urbana 11 1933 p. 253.

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Anoplostrongylus alatus sp. n. pp. 183-186 figs. 1-3, *ornatus* (Mönnig) p. 186 in intestine of bat, *Miniopterus natalensis*, South Africa, ORTLEPP Rep. Vet. Serv. Pretoria 18 1932.

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STONE Rec. Ind. Mus. Calcutta **34** 1932 pp. 257-259 figs. 56-62.—*O. sikae* sp. n. in large intestine of Japanese deer, *Sika nippon*, Scotland, CAMERON & PARNELL Proc. Phys. Soc. Edinburgh **22** 1933 p. 140 fig. 6.—*O. maurum* Hung in *Macaca assamensis*, Indo-China, SANDGROUND Z. Parasitenk. Berlin **5** 1933 pp. 504-506 figs. 19-21.—*O. walkeri* Mönnig in large intestine of eland, *Taurotragus oryx*, Kenya, pp. 87-89 figs. 23-25, *africanum* Mönnig in colon of springbuck, *Antidorcas marsupialis*, S. Africa, pp. 89-91 figs. 26, 27, MÖNNIG Onderstepoort J. Pretoria **1** 1933.

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strongylidae, *cynictis* sp. n. in intestine

of yellow mongoose, *Cynictis penicillata*, Transvaal, LEROUX Ann. Mag. Nat. Hist. London (10) 11 1933 pp. 222–228 7 figs.

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strongylinae, type *Ostertagia callis* Travassos 1914, ORLOFF Ann. Parasitol. Paris 11 1933 pp. 100–102 fig. 3.

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Viannaia morenishi sp. n. in intestine of mole, *Talpa europaea*, Scotland, CAMERON & PARNELL Proc. Phys. Soc. Edinburgh 22 1933 p. 148 figs. 13–15.

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Ascaridoidea.

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Acrobeloides butschlii (De Man) in association with *Tylenchus similis* Cobb on tea plants, Java, STEINER & BUHRER Z. Parasitenk. Berlin 5 1933 p. 419 fig. 4.

Actinolaimus palmaeri sp. n., Congo, ALLGÉN Zool. Anz. Leipzig 103 1933 p. 318 fig. 8.

Aegialolaimus elegans Man p. 62 fig. 34, *tenuicaudatus* Allg. p. 63 fig. 36, *cylindricauda* p. 62 fig. 35, *sabulicola* p. 64 fig. 37 spp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933.

Agamascaris odontocephala Steiner from *Rana catesbiana* and *R. clamitans*, U.S.A., WALTON Proc. U.S. Nat. Mus. Washington 82 1933 vi p. 4.

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Alaeuris conspicua sp. n. in intestine of *Testudo verreauxi*, South Africa, ORTLEPP Onderstepoort J. Pretoria 1 1933 pp. 107-109 figs. 16-22.

Amplicaeum novempapillatum sp. n. in "hairy frog," *Astylosternus robustus*, Cameroon, SANDGROUND Ann. Mag. Nat. Hist. London (10) 12 1933 pp. 29-31 fig. 1.

Angiostoma plethodontis sp. n. in intestine of *Plethodon cinereus*, Virginia, CHITWOOD J. Wash. Acad. Sci. 23 1933 pp. 509-511 figs. 1-6.

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Anguillulina dipsaci Kühn p. 5 figs. 1, 2, *pratensis* (Man) p. 8 fig. 3, *turbo* (Marcinowitsch) p. 28, *gracilis* var. *minor* var. n. p. 21 fig. 10 in relation to potatoes, GOFFART Mitt. Biol. Reichsanst. Berlin 47 1933.—*A. graminophila* sp. n. on fine bent-grass, *Agrostis tenuis* (s. *vulgaris*), England, GOODEY J. Helminth. St. Albans 11 1933 pp. 45-56 6 figs.

Angustinema gen. n. Enoplidae, *nudum* sp. n. in marine mud, Massachusetts, COBB J. Parasit. Urbana 20 1933 p. 83.

Anisakis alata sp. n. in stomach of walrus, Hamburg Zoo, Hsü Peking Nat. Hist. Bull. 8 1933 pp. 59-62 1 pl.—*A. alexandri* sp. n. in stomach of dolphin,

Sotalia sinensis, Amoy, China, Hsü & HOEPLI Peking Nat. Hist. Bull. 8 1933 pp. 165-167 pl. iv figs. 12-15.

Anticoma vanoorti sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 13 fig. 1.

Antopus gen. n. Enoplidae, type *Stenolaimus serialis* Baylis, COBB J. Parasit. Urbana 20 1933 p. 82.

Aphelenchoides minor (Cobb) in association with *Tylenchus similis* on tea plants, Java, STEINER & BUHRER Z. Parasitenk. Berlin 5 1933 p. 419 fig. 5.

Aphelenchus parietinus Bastian, China, HOEPLI & CHU Hong Kong Nat. Suppl. 1 1932 p. 25 fig. 27; associated with *Scolytus scolytus* Holland, FUCHS Capita Zool. 's Gravenhage 4 1933 pp. 28-30 pl. vii.—*A. kongoensis* sp. n. Congo, ALLGÉN Zool. Anz. Leipzig 103 1933 pp. 319-320 fig. 9.

Aplectana sp. in intestine of *Hynobius fuscus*, Japan, WALTON J. Parasit. Urbana 20 1933 p. 18.—*A. kraussii* sp. n. in "leaf-wasp" *Lyda* sp., STEINER Cbl. Bakt. Jena (ii) 59 1923 pp. 14-18.—*A. americana* Walton from *Scaphiopus couchii*, Texas, WALTON Proc. U.S. Nat. Mus. Washington 82 1933 vi p. 4.—*A. macintoshii* (Stewart) in rectum of *Bufo melanostictus*, China, Hsü & HOEPLI Peking Nat. Hist. Bull. 8 1933 pp. 161-165 pl. iii figs. 9-11.

Aproctonema entomophagium Keilin in larvae of *Sciara pullula* (Diptera), KEILIN & ROBINSON Parasitology Cambridge 25 1933 pp. 285-295 pls. xix, xx.

Araeolaimus cobbioides sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 108 fig. 69.

Ascaridia columbae (Gmelin) in intestine of doves, *Streptopelia turtur* and *Spilopelia surattensis*, Indo-China, Hsü Peking Nat. Hist. Bull. 7 1932 pp. 103-106 figs. 7-12.—*A. pintoi* sp. n. in intestine of *Rhynchotus rufescens*, Rio Grand do Sul, TRAVASSOS C.R. Soc. Biol. Paris 112 1933 pp. 1475-1476 2 figs.—*A. sergiemeirai* sp. n. in intestine of *Brotogetis tui* and *Psittacula passerina*, Brazil, PEREIRA Rev. Med.-Chir. Brasil 41 1933 pp. 8-10 10 figs.

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Ascolaimus elongatus (Bütschli) Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 112 fig. 74.

Aspidodera reisi sp. n. in large intestine of *Mormosa murina* (Didelphidae), Brazil, Vaz Rev. Med.-Cirurg. Brasil Rio de Jan. 41 1933 pp. 56-58 4 figs.

Atractis sp. in intestine of *Bufo viridis*, (*variabilis*), Europe, WALTON J. Parasit. Urbana 20 1933 p. 24 figs. 2-4. — *A. africana* sp. n. in intestine of *Testudo verreauxii*, South Africa, ORTLEPP Onderstepoort J. Pretoria 1 1933 pp. 112-113 figs. 29, 30.

Bathylaimus macramphus p. 1 pl. i figs. 1-3, *paralongisetosus* pp. 2-3 pl. i figs. 4-6, *stenolaimus* p. 4 pl. ii figs. 1, 2, spp. n. Belgian coast, STEKHOVEN Bull. Mus. R. Hist. nat. Belg. Brussels 9 iv 1933.

Belanisakis gen. n. Anisakinae, *ibidis* sp. n. in intestine of *Ibis melanocephalus*, Calcutta Zoo, MAPLESTONE Rec. Ind. Mus. Calcutta 34 1932 pp. 231-233 figs. 5-9.

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Bradynema veliae in body cavity of *Velia currens* p. 464 figs. 1-3, *nepae* in *Nepa* p. 464 fig. 4, *gerridis* in *Gerris najas* p. 466 figs. 5, 6, spp. n. France, POISSON Ann. Parasitol. Paris 11 1933.

Camacolaimus ocellatus (Cobb) p. 41 fig. 19, *röbergensis* p. 41 fig. 20, *tenuicaudatus* p. 42 fig. 21, *brachyuris* p. 42 fig. 22, *norwegicus* p. 43 fig. 23, spp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933.

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Cephalobellus papilliger Cobb, histological anatomy, CHITWOOD & CHITWOOD Z. Zellforsch. Berlin 19 1933 pp. 309-355.

Cephalobus persegnis (Bast.) var. *setifer* var. n. associated with *Scolytus scolytus*, Holland, FUCHS Capita Zool. 's Gravenhage 4 1933 p. 27 pl. vii.—*C. rigidus* (Schneider) on potato, GOFFART Mitt. Biol. Rchsanst. Berlin 47 1933 p. 20 fig. 8.

Ceramoneminae subf. n. of Desmodoridae, to include *Ceramonema*, *Pselionema* and *Pristionema*, COBB J. Parasit. Urbana 20 1933 p. 81.

Chilocrypta subg. n. of *Skrjabinema*, for *S. rupicaprae*, *S. africana* sp. n. and *S. alata* sp. n., S. Africa, MÖNNIG Rep. Vet. Serv. Pretoria 18 1932 pp. 165-168 figs. 24, 25.

Chromadora paramucrodonta Allg. p. 71 fig. 39, *armata* sp. n. p. 73 fig. 40, Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933.

Chromadorata [subord. n.] of order Chromadorida, CHITWOOD J. Parasit. Urbana 20 1933 p. 131.

Chromadorida ord. n. to include suborders Chromadorata, Desmoscolecta and Monhysterata, CHITWOOD J. Parasit. Urbana 20 1933 p. 131.

Chromagaster anticomoides sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 114 fig. 76.

Cissophyllus leytsensis sp. n. in large intestine of *Hydrosaurus pustulosus*, Philippine Is., TUBANGUI & VILLAMIL Philipp. J. Sci. Manila 51 1933 pp. 611-612 pl. iii figs. 1-5.

Cobbia trefusiaeformis Man, Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 92 fig. 55.

Conolaimus longisetosus Allg., Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 106 fig. 68.

Contracaecum hippoglossi, *taii*, *naitoi*, *hypomesi*, *ochotense*, *benimasu* spp. n. in fishes, Japan, FUJITA Bull. School Fishery Hokkaido Imp. Univ. 2 1932 pp. 36-40 1 pl. [n.v.].—*C. hagedashiae* sp. n. in *Hagedashia hagedash nilotica*, Tanganyika, SANDGROUND Bull. Mus. Comp. Zool. Harvard 75 1933 pp. 279-281 figs. 8, 9.—*C. aduncum* (Rud.) in various fishes, Baltic, MARKOWSKI Arch. Hydrobiol. Suwalki 7 1933 pp. 38-43 figs. 22-26.—*C. amoyensis* sp. n. in stomach of marine eel, *Muraenesox cinereus*, China, HSÜ Peking Nat. Hist. Bull. 8 1933 pp. 147-149 pl. i figs. 1-6.

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Cosmocercoides pulcher Wilkie in rectum of *Bufo bufo japonica*, China, HSÜ Parasitol. Cambridge 24 1933 pp. 515-517 figs. 7-10, 45.

Cothonolaimus tenuicaudatus p. 38 fig. 17, *zostericola* p. 39 fig. 18 spp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933.

Cruznema cruznema Artigas 1927 syn. of *Rhabditis lambdiensis* Maupas 1919, CHITWOOD J. Parasit. Urbana 19 1933 p. 253.

Cryptolaimus gen. n. Monhysteridae, *cylindricollis*, New Caledonia p. 85, *pellucidus*, S. Australia p. 86, spp. n., COBB J. Parasit. Urbana 20 1933.

Cyatholaimus chungsan sp. n. China, HOEPLI & CHU Hong Kong Nat. Suppl. 1 1932 p. 22 figs. 1-3.—*C. tautraensis* p. 48 fig. 25, *savaljevi* p. 49 fig. 26, *nordgaard* p. 50 fig. 27, *minutus* p. 50 fig. 28, spp. n., Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933.—*C. oistospiculum* sp. n., Congo, ALLGÉN Zool. Anz. Leipzig 103 1933 p. 312 fig. 2.

Cyathonchus gen. n. Enopliidae, *tenuicaudatus* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 pp. 83-84.

Cylicolaimus armatus Dittl., Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 16 fig. 2.

Cylindrogaster longistoma (Stef.), relationships, STEINER J. Parasit. Urbana 20 1933 pp. 66-68 5 figs.

Cylindrogasteridae fam. n. Rhabditoidea, to contain *Cylindrogaster*, *Myctolaimus*, *Goodeyus* and *Longibucca*, CHITWOOD J. Wash. Acad. Sci. 23 1933 pp. 512-513.

Cylindrolaimus filicaudatus p. 316 fig. 5, *abnormis* p. 317 fig. 6 spp. n., Congo, ALLGÉN Zool. Anz. Leipzig 103 1933.

Cynura tenuicauda sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 122 fig. 81.

Dasyllaimus gen. n. Chromadoridae, *nudus* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 p. 89.

Dasyinemella gen. nom. n. pro *Dasy-nema* Cobb, 1920, preocc., COBB J. Parasit. Urbana 20 1933 p. 81.

Denticulella gen. n. Chromadoridae, *pellucida* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 p. 89.

Deontostoma californicum sp. n. Pacific Coast, California, STEINER & ALBIN J. Wash. Acad. Sc. 23 1933 pp. 25-30 7 figs.

Dermatolaimus elegans sp. n. Belgian coast, STEKHOVEN & CONINCK Bull. Mus. R. Hist. Nat. Belg. Brussels 9 iv 1933 p. 7 pl. ii figs. 3-5.—*D. dittelevseni* Steiner, Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 44 fig. 24.

Desmodora microchaetoides sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 58 fig. 32.

Desmodorella gen. n. Desmodoridae, *cephalata* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 pp. 92-93.

Desmolaimus zosteræ sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 93 fig. 56.

Desmoscoleata [subord. n. ?] of Chromadorida, CHITWOOD J. Parasit. Urbana 20 1933 p. 131.

Dichromadora longiseta sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 74 fig. 41.

Diplogaster lheritieri Maupas p. 24, *microcerca* Wollenweber p. 25 on potato, GOFFART Mitt. Biol. Rchsanst. Berlin 47 1933.—*D. paulyi* pp. 16-23 pls. iv-vi, *striatulus* pp. 24-27 pls. v-vi spp. n. on *Scolytus scolytus*, FUCHS Capita Zool. 's Gravenhage 4 1933.

Diploscapter coronata (Cobb), China, HOEPLI & CHU Hong Kong Nat. Suppl. 1 1932 p. 24 figs. 7, 14-16.

Dispira gen. n. Chromadoridae, *punctata* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 p. 87.

Dispirella gen. n. Chromadoridae, *truncata* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 pp. 87-88.

Dolicholaimus propinquus sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 36 fig. 15.

Dorylaimata [subord. n. ?] of order Enopliida, CHITWOOD J. Parasit. Urbana 20 1933 p. 131.

Dorylaimus sp., Congo, ALLGÉN Zool. Anz. Leipzig 103 1933 p. 317 fig. 7.—*D. helveticus* Steiner p. 57 fig. 1, *similis* De Man pp. 58-59 fig. 2, FILIPJEV Zool. Anz. Leipzig 103 1933.

Drepanonema gen. nom. n. pro *Chaetosoma* Clap. 1863, preocc., COBB J. Parasit. Urbana 20 1922 p. 81.

Dujardinia paulista, longispicula spp. n. in stomach of crocodile, *Caiman sclerops*, Brazil, TRAVASSOS C.R. Soc. Biol. Paris 114 1933 p. 834.

Echintomermella gen. n. append. to Mermithoidea, type *Ichthyonema grayi* (Gemmill), CHITWOOD J. Parasit. Urbana 20 1933 p. 104.

Eleutherolaimus parastenosoma sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 85 fig. 48.

Enoplata [subord. n. ?] of order Enoplida, CHITWOOD J. Parasit. Urbana 20 1933 p. 131.

Enoplida ord. n. to include suborders Enoplata and Dorylaimata with appendix Diotophymata, CHITWOOD J. Parasit. Urbana 20 1933 p. 131.

Enoplolaimus sabulicola sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 24 fig. 8.

Enoplus coloratus sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 23 fig. 7.

Enterobius callithricis sp. n. in *Callithrix jacchus*, Zool. Gardens, London, SOLOMON J. Helminth. St. Albans 11 1933 pp. 95-99 5 figs.

Euchromadora aetiopica sp. n., Congo, ALLGÉN Zool. Anz. Leipzig 103 1933 pp. 313-314 fig. 3.

Eulinhomoeus vide *Linhomoeus*.

Goodeyus gen. n. type *Cylindrogaster ulmi* Goodey 1930, CHITWOOD J. Wash. Acad. Sci. 23 1933 p. 513.

Greenia gen. n. near *Chromadora* and *Plectus, orientalis* sp. n. China, HOEPLI & CHU Hong Kong Nat. Suppl. 1 1932 pp. 19-20 figs. 17, 21-24.

Halalaimoides gen. n. Enoplidae, *acuminata* sp. n., Woods Hole, Massachusetts, COBB J. Parasit. Urbana 20 1933 p. 83.

Halalaimus longicollis Allg., Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 21 fig. 6.

Halenchus gen. n. Tylenchidae, type *Tylenchus fusicola* Man on *Fucus*, Woods Hole, COBB J. Parasit. Urbana 20 1933 p. 94.

Halichoanolaimus consimilis sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 pp. 56-57 fig. 31.

Halinema norvegicum sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 101 fig. 64.

Heterakis gallinae (Gmel.) in caecum of *Phasianus nycthemerus*, Indo-China, Hsü Peking Nat. Hist. Bull. 7 1932 pp. 100-101 figs. 1, 2.—*H. spumosa* Schn. in intestine and caecum of bamboo rat, *Rhizomys* sp., China, Hsü Parasitol. Cambridge 24 1933 p. 514 figs. 5, 6.—*H. dakomensis* Gendre 1911 in pouched rat, *Cricetomys gambianus*, McCLEURE Zoologica New York 15 1933 pp. 40-42.—*H. silindae* sp. n. in caeca of francolin, *Pternistis afer swynnertoni*, Rhodesia, SANDGROUND Bull. Mus. Comp. Zool. Harvard 75 1933 pp. 272-273 fig. 3.

Heterodera schachtii Schm. on cacti, *Phyllocactus akkermannii* and *Cereus speciosus*, Pays Bas, ADAM Bull. Mus. Hist. Nat. Belg. 8 1932 no. 23 10 pp. 6 figs.; on sugar beet, Canada, BROWN Scient. Agric. Ottawa 12 1932 pp. 544-552 6 figs., GOFFART Mitt. Biol. Rehsanst. Berlin 47 1933 p. 10 figs. 5, 6.—*H. marioni* (Cornu) on potato, GOFFART t.c. p. 12.

Hexatylus viviparus Goodey on potato, GOFFART Mitt. Biol. Rehsanst. Berlin 47 1933 pp. 26-28 fig. 13.

Hoplolaimus bradys sp. n. on yams, Jamaica, STEINER & LE HEW Zool. Anz. Leipzig 101 1933 pp. 260-264 3 figs.

Howardula phyllotretae sp. n. in body-cavity of flea beetles, *Phyllotreta* spp., England and Germany, OLDHAM J. Helminth. St. Albans 11 1933 pp. 119-136 3 figs.

Hypodontolaimus abyssalis sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 65 fig. 38.

Iota Cobb 1913, preocc., replaced by *Ogma* Southern 1914, COBB J. Parasit. Urbana 20 1933 p. 82.

Ironinae subf. n. of Odontophryngidae, MICOLETZKY Arch. Naturg. Berlin A 87 1921 (1922) p. 323, transferred to Oncholaimidae, BAYLIS & DAUBNEY Synopsis 1926 pp. 109, 139.

Latilaimus gen. n. Monhysteridae, *zosteræ* sp. n., Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 90 fig. 54.

Leptodera elongata Baird transferred to *Spirogonura*, WALTON Ann. Mag. Nat. Hist. London (10) 9 1932 p. 146.—*L. macrolaima* Schneider transferred to *Cylindrogaster*, CHITWOOD J. Wash. Acad. Sci. 23 1933 p. 513.

Leptolaimus setiger sp. n. Belgian coast, STEKHOVEN & CONINCK Bull. Mus. R. Hist. Nat. Belg. Brussels 9 iv 1933 p. 8 pl. iv figs. 1, 2.

Linhomoeus (*Eulinhomoeus*) *paralineatus* p. 94 fig. 57, *primitivus* p. 95 fig. 58, *ilenensis* p. 95 fig. 59, spp. n., (*Paralinhomoeus*) *trichurus* sp. n. p. 98 fig. 60, Trondhjem Fiord, (*Metalinhomoeus*) *typicus* Man p. 99 fig. 61, *longicaudatus* Allgén p. 99 fig. 62, *tristis* sp. n. p. 101 fig. 63 Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933.

Linolaimus gen. n. Monhysteridae, *quadricoma* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 p. 86.

Longibucca gen. n. Cylindrogasteridae, *vivipara* sp. n. in stomach of *Pseudoboa cloelia*, Zool. Park, Washington, CHITWOOD J. Wash. Acad. Sci. 23 1933 pp. 514–516 figs. 7–10, 19, 20.

Longicyatholaimus zosteræ sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 52 fig. 29.

Mermis tamalensis, Gold Coast, W. Africa, pp. 413–417 figs. 1–5, *pussardi* in *Psylla alni*, *P. försteri* and *P. viburni*, France, pp. 417–420 figs. 6–8, spp. n., BAYLIS Ann. Mag. Nat. Hist. London (10) 11 1933.

Mermithiformes superf. n. of subord. Ascaroidea, RAUTHER in KÜKENTHAL & KRUMBACH Handb. d. Zool. 2 1930 p. 384.

Metalinhomoeus vide *Linhomoeus*.

Microalaimoides lingi sp. n. China, HOEPLI & CHU Hong Kong Nat. Suppl. 1 1932 p. 21 figs. 11–13, 25–26.

Microalaimus acuticaudatus p. 5 pl. iii figs. 1–3, *robustidens* p. 6 pl. iii figs. 4–7, spp. n. Belgian coast, STEKHOVEN Bull. Mus. R. Hist. Nat. Belg. Brussels 9 iv 1933.

Monhystera filiformis var. *fukiensis* var. n. China, HOEPLI & CHU Hong Kong Nat. Suppl. 1 1932 p. 24 figs. 8–10.—*M. normandica* Man var. *nidrosiensis* var. n. p. 78 fig. 42, *paraambigua* sp. n. p. 79 fig. 43, *lata* var. *arctica* Steiner p. 79 fig. 44, *gracillima* Kreis pp. 80–82, *trichospiculum* p. 83 fig. 45, *norwegica*

p. 83 fig. 46, *nidrosiensis* p. 84 fig. 47 spp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933.

Monhysterata [subord. n. ?] of order Chromadorida, CHITWOOD J. Parasit. Urbana 20 1933 p. 131.

Monhysterides testudinicola sp. n. in large intestine of freshwater tortoise, *Trionyx cartilagineus*, Pahang, Malaya, BAYLIS Ann. Mag. Nat. Hist. London (10) 11 1933 pp. 618–622 figs. 2–5.

Monhystrella ginglingensis sp. n. China, HOEPLI & CHU Hong Kong Nat. Suppl. 1 1932 p. 23 figs. 18–20.

Mononchus sp., Congo, ALLGÉN Zool. Anz. Leipzig 103 1933 p. 312 fig. 1.—*M. cobbi* Cassidy 1931 a variety of *M. parvus* Man, CASSIDY J. Parasit. Urbana 20 1933 pp. 102–103 1 fig.

Multicaecum baylisi sp. n. in stomach of *Caiman sclerops*, Brazil, TRAVASSOS C.R. Soc. Biol. Paris 114 1933 p. 834.

Neonyx gen. n. Desmodoridae, *can-cellatus* (type), *campycoma* p. 91, *alatus* p. 92 spp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933.

Neotonchus gen. n. Chromadoridae, *punctatus* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 pp. 86–87.

Neotylenchus abulbosus Steiner, structure of male, STEINER & BUHRER J. Washington Acad. Sc. 22 1932 pp. 482–484 1 fig.; parasitic on potato, GOF-FART Mitt. Biol. Rehsanst. Berlin 47 1933 pp. 8–10 fig. 4.

Nunema gen. n. Chromadoridae, *nanum* sp. n., Massachusetts, COBB J. Parasit. Urbana 20 1933 p. 90.

Nygmatonchus gen. n. Chromadoridae, *scriptus* sp. n., Massachusetts, COBB J. Parasit. Urbana 20 1933 p. 90.

Odontocricus Steiner raised to generic rank, COBB J. Parasit. Urbana 20 1933 p. 82.

Odontophora longicaudata sp. n. Belgian coast, STEKHOVEN & CONINCK Bull. Mus. R. Hist. Nat. Belg. Brussels 9 iv 1933 pp. 8–9 pl. iv figs. 3, 4.

Omicronema nidrosiensis sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 86 fig. 49.

Oncholaiminae subf. n. of Odontopharyngidae, MICOLETZKY Arch. Naturg. Berlin A 87 1921 (1922) p. 330; transferred to Oncholaimidae, BAYLIS & DAUBNEY Synopsis 1926 p. 109.

Oncholaimus brachycercoides p. 26 fig. 9, *gunneri* p. 27 fig. 10, (*Viscosia*) *abyssorum* p. 29 fig. 11 spp. n. Trondhjem Fiord, ALLGÉN *Capita Zool.* 4 ii 1933.

Oxysomatium punctatum sp. n. from intestine of *Rana vittigera*, Philippine Islands, WALTON *Proc. U.S. Nat. Mus. Washington* 82 1933 vi pp. 3-4 figs. 1d-g.—*O. baylisi* sp. n. in intestine of *Rana limnocharis*, Java, WALTON J. *Parasit. Urbana* 20 1933 p. 22 fig. 1.—*O. ? chamaeleonis* Baylis in "hairy frog," *Astylosternus robustus*, Cameroon, SANDGROUND *Ann. Mag. Nat. Hist. London* (10) 12 1933 p. 33.

Oxystomina nidrosiense sp. n. Trondhjem Fiord, ALLGÉN *Capita Zool.* 4 ii 1933 p. 17 fig. 3.

Oxyuridiformes *superf.* n. of subord. Ascaroidea, RAUTHER in KÜENTHAL & KRUMBACH *Handb. d. Zool.* 2 1930 p. 381.

Oxyuris hamata Linst. in intestine of *Myopotamus coypus*, HENRY *Bull. Soc. Nat. Acclim. Paris* 78 1931 pp. 436-437 fig. 13.—(? *Oxyuris*) *capreoli* sp. n. in large intestine of roe deer, *Capreolus capreolus* pp. 138-139 figs. 2-5, *acutissima* in red squirrel, *Sciurus vulgaris* pp. 146-147 figs. 11-12, Scotland, CAMERON & PARNELL *Proc. Phys. Soc. Edinburgh* 22 1933.

Ozolaimus megatyphlon (Rud.) in *Iguana tuberculata*, S. Africa, ORTLEPP Onderstepoort J. Pretoria 1 1933 pp. 93-96 6 figs.

Pandolaimus sabulicola Allg., Trondhjem Fiord, ALLGÉN *Capita Zool.* 4 ii 1933 p. 32 fig. 12.

Parachromagaster sabulicola Allg. p. 109 fig. 70, *zosteræ* sp. n. p. 110 fig. 71, Trondhjem Fiord, ALLGÉN *Capita Zool.* 4 ii 1933.

Parachromagasteriella gen. n. Monhysteridae, *cylindricauda* sp. n. Trondhjem Fiord, ALLGÉN *Capita Zool.* 4 ii 1933 p. 111 fig. 72.

Paralinhomoeus vide *Linhomoeus*.

Paramermis lepnevæ sp. n. with note on genus *Paramermis*, FILIPJEV *Zool. Anz. Leipzig* 103 1933 pp. 59-62 figs. 3a, b.

Parapharyngodon gen. n. *Oxyurinae*, *maplestoni* sp. n. in intestine of Burmese

lizard, *Calotes versicolor*, Burma, CHATTERJI *Ann. Trop. Med. Parasit. Liverpool* 27 1933 pp. 131-134 5 figs.

Parasabatieria similis sp. n. Trondhjem Fiord, ALLGÉN *Capita Zool.* 4 ii 1933 p. 120 fig. 80.

Parasitylenchus scolyti sp. n. in *Scolytus scolytus*, Holland, FUCHS *Capita Zool.* 's Gravenhage 4 1933 p. 5 pl. i figs. 1-3.

Paraspidodera uncinata (Rud.) in colon and caecum of *Cavia aperea*, *C. porcellus* and *Agouti paca*, Brazil, PEREIRA & VAZ *Rev. Biol. Hyg. S. Paulo* 4 1933 pp. 52-55 9 figs.

Passalurus assimilis sp. n. in caecum of hare, *Lepus sinensis*, Nanking, WU *Sinensia Nanking* 4 1933 pp. 51-54 figs. 1-7.

Pelodera axei Cobbold 1884 identified with *Leptodera elongata* Schneider 1866, transferred to genus *Rhabditella* (Cobb) Chitwood, CHITWOOD J. *Parasit. Urbana* 19 1933 p. 243.

Pharyngodon armatus sp. n. from intestine of *Rana pipiens* and *R. clamitans*, Virginia, WALTON *Proc. U.S. Nat. Mus. Washington* 82 1933 vi pp. 1-3 fig. 1 a-c.—*P. laevicauda* Seurat in rectum of *Hemidactylus bouringi*, China, HSÜ & HOEPLI *Peking Nat. Hist. Bull.* 8 1933 p. 158.

Plectus chengmohliangi sp. n. China, HOEPLI & CHU Hong Kong *Nat. Suppl.* 1 1932 p. 20 figs. 4-6.

Polydelphis mucronata sp. n. in intestine of *Python reticulatus*, Zool. Gardens, Rome, PANAGIA *Ann. Med. Nav. Colon. Rome* 39 1933 pp. 76-78 1 pl.

Porrocaecum cheni in intestine of Chinese blackbird, *Planesticus mandarinus* pp. 280-282 pl. ii figs. 1-9, *wui* in intestine of *Corvus macrorhynchus intermedius*, *Pica caudata* and *Urocissa sinensis* pp. 282-284 pl. iii figs. 10-18 spp. n., *reticulatum* (Linst.) in intestine of night heron, *Nycticorax nycticorax* pp. 284-285 China, HSÜ J. *Parasit. Urbana* 19 1933.—*P. ensicaudatum* (Zed.) in *Corvus frugilegus* and *C. cornix*, Poland, MARKOWSKI *Mém. Acad. Polon. Cracovie B* 1933 pp. 42-44 figs. 21-23.

Prismatolaimus intermedius (Bütschli), Congo, ALLGÉN *Zool. Anz. Leipzig* 103 1933 p. 315 fig. 4.

Pristionema gen. n. Desmodoridae, *oculata* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 p. 93.

Protrellina Chitwood 1932 syn. of *Protrellus* Cobb, 1920, CHITWOOD J. Parasit. Urbana 19 1933 p. 253.

Pselionema gen. nom. n. pro *Steineria* Filipjev (1922) 1925, COBB J. Parasit. Urbana 20 1933 p. 82. [Vide etiam *Steineria*.]

Pseudonchus norwegicus sp. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933 p. 53 fig. 30.

Pteronium gen. n. Desmodoridae, *obesum* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 pp. 93-94.

Pulchranemella gen. n. Monhysteridae, *setosa* sp. n. Massachusetts, COBB J. Parasit. Urbana 20 1933 p. 85.

Raphidascaris canadensis sp. n. in intestine of *Esox lucius*, Canada, SMEDLEY Contr. Canad. Biol. n.s. 8 1933 p. 174 fig. 2 [vide etiam *Raphidascaris*].

Rhabdias annulosa sp. n. in lung of snake, *Zaocys dhumnades*, Nanking, China, HSŪ Parasitol. Cambridge 24 1933 pp. 512-514 figs. 1-4.

Rhabditata [subord. n.] of order Rhabditida, CHITWOOD J. Parasit. Urbana 20 1933 p. 131.

Rhabditella Cobb 1929 raised to generic rank, CHITWOOD J. Parasit. Urbana 19 1933 p. 243.

Rhabditida ord. n. of subel. Phasmidia, to include suborders Rhabditata, Strongylata and Ascaridata, CHITWOOD J. Parasit. Urbana 20 1933 p. 131.

Rhabditinae subf. n., MICOLETZKY Arch. Naturg. Berlin 87 1921 (1922) p. 245.

Rhabditis cambari sp. n. in gill chamber of crayfishes, *Cambarus acuminatus* and *C. blandingii*, North Carolina, ALLEN J. Elisha Mitchell Sci. Soc. Chapel Hill 49 1933 pp. 120-121 pl. iii.—*R. franseni* sp. n. pp. 10-13 pls. i-iii, *lagustris* (Micol.) pp. 14-16 pl. iii, on *Scolytus scolytus*, Holland, FUCHS Capita Zool. 's Gravenhage 4 1933.—*R. macrocerca* pp. 163-168 pl. xxvii, *clavopapillata* pp. 168-171 pl. xxviii spp. n. associated with dogs and monkeys, experimentally, North America, KREIS & FAUST Trans. Amer. Micr. Soc. Menasha 52 1933.—*R.*

marina varr. *norwegica* p. 123 fig. 82, *nidrosiensis* p. 124 fig. 83 varr. n. Trondhjem Fiord, ALLGÉN Capita Zool. 4 ii 1933.—*R. terricola* Duj. p. 517 figs. 11-14, *lucanis* Maupas pp. 518-519 figs. 15-18 in lungs of *Salamandra salamandra* Zool. Park, Washington, CHITWOOD J. Wash. Acad. Sci. 23 1933:—*R. brevispina* (Claus) p. 14 fig. 7, *monohystera* Bütschli pp. 15-17 fig. 8, *cryptocercoides* Wollenweber pp. 18-20, *aspera* Bütschli p. 25 fig. 12 on potato, GOFFART Mitt. Biol. Rechtsanst. Berlin 47 1933.—*R. lambdiensis* Maupas in mushroom beds, N. America, STEINER J. Agric. Res. Washington 46 1933 pp. 427-435 4 figs.

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23-24 text-fig. 3 pl. i figs. 1, 2.—*H. indica* Kinb., Malacca Straits, pp. 200-202, (*Austrolaenilla*) *mollis* M. Sars pp. 202-203, AUGENER Zool. Meded. Leiden 15 1933.—*H. waahli* (Kinb.), S. Africa, MONRO Ann. Mag. Nat. Hist. London (10) 11 1933 pp. 489-491 figs. 1-3.

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Heterocirrus andersonensis sp. n. Peter Island, Antarctic, AUGENER Sci. Res. Norwegian Antarc. Exped. 1927-28 1932 ix pp. 46-47 fig. 3.

†*Hyalinaecites* gen. n. Onuphidae, p. 1202, *aequidentatus*, *aureatus* p. 1203, *parvus*, *plenus*, *subulatus* p. 1204, *typicalis* p. 1205 figs., spp. n., Middle Ordovician, Minnesota, STAUFFER Bull. Geol. Soc. Amer. Washington 44 1933.

Iphitime paguri sp. n. commensal in branchial chamber of *Portunus depurator*, Langoustines, FAGE & LEGENDRE Bull. Soc. zool. Fr. 58 1933 pp. 299-305 5 figs.

Johnstonella vide *Tomopteris*.

Laetmonice filicornis Kinb., Willem Barents Exped., AUGENER Zool. Meded. Leiden 15 1933 pp. 190-191.

Lagis vide *Pectinaria*.

Lamellisabella gen. n. Sabellidae, *zachsii* sp. n. Sea of Okhotsk, USCHAKOW Zool. Anz. Leipzig 104 1933 pp. 205-208 2 figs.

Lanicides bilobata Grube, syn. *L. vayssierei* Monro 1930, Antarctic, AUGENER Sci. Res. Norwegian Antarc. Exped. 1927-28 1932 ix pp. 63-64.—Var. *antillensis* Aug., Florida, MONRO Ann. Mag. Nat. Hist. London (10) 12 1933 p. 265 fig. 12.

Lepidasthenia minikoensis Potts ?, Galapagos Is., AUGENER Nyt Mag. Naturv. Oslo 73 1933 pp. 58-60 fig. 1.

Lepidonotus siluensis Horst, Curacao, AUGENER Bijdr. Dierk. Amsterdam 25 1927 p. 44 fig. 1.—*L. (Thormora) jukesi* Baird, Antilles, AUGENER Zool. Meded. Leiden 15 1933 pp. 105-106.

Lumbriclymenella robusta Arwidss., Antarctic, AUGENER Sci. Res. Norwegian Antarc. Exped. 1927-28 1932 ix pp. 49-50.

Lumbriconereis pseudobifilaris, Burma pp. 154-156 text-fig. 22 pl. iv figs. 7-13, *notocirrata*, India, text-fig. 23 pl. vii figs. 1-8 spp. n., FAUVEL Mem. Ind. Mus. Calcutta 12 1932.

†*Lumbriconereis affinis*, *arcuatus*, *cameratus* p. 1194, *cognitus*, *crenatus*, *inflexus* p. 1195, *modestus*, *perfectus*, *plattervillensis*, *potensis* p. 1196, *similis*, *speciosus*, *superbus* p. 1197, *webbi* p. 1198 figs., spp. n. Middle Ordovician, Minnesota, STAUFFER Bull. Geol. Soc. Amer. Washington 44 1933.

Lumbrinereis heteropoda Marenz., pp. 258-259 fig. 8, *floridana* var. *polygonatha* var. n. p. 260 fig. 9, Florida, MONRO Ann. Mag. Nat. Hist. London (10) 12 1933.

Lycastis meraukensis Horst, New Guinea, AUGENER Zool. Meded. Leiden 16 1933 pp. 113-116 fig. 9.—*L. terrestris* pp. 66-69 figs. 1-3, 17, *nipae* p. 69 figs. 4-6, *vivax* p. 69 figs. 7, 8, 15, 16, spp. n. Dutch East Indies, PFLUGFELDER Zool. Anz. Leipzig 105 1933.—*L. longicirris* sp. n. Formosa, TAKAHASHI Annot. zool. jap. 14 1933 pp. 41-46 6 figs.

Lycastopsis hummelincki sp. n. S. America, AUGENER Zool. Jahrb. Jena (Syst.) 64 1933 pp. 352-355 fig. 1.—*L. amboinensis* sp. n. Dutch East Indies, PFLUGFELDER Zool. Anz. Leipzig 105 1933 pp. 69-71 figs. 9-11.

Macellicephala mirabilis McInt., Willem Barents Exped., AUGENER Zool. Meded. Leiden 15 1933 pp. 206-207 fig. 1.

Malmgrenia curacoënsis Horst, Curaçoa, AUGENER Bijdr. Dierk. Amsterdam 25 1927 pp. 45-47 fig. 2.

Melinna aberrans sp. n., India, FAUVEL Mem. Ind. Mus. Calcutta 12 1932 pp. 221-222 pl. ix figs. 21-26.

Mercierella enigmatica Fauvel, Madras coast, FAUVEL Mem. Ind. Mus. Calcutta 12 1932 pp. 249-251.

Microspio atlantica Lang, S. America, AUGENER Zool. Jahrb. Jena (Syst.) 64 1933 p. 355.

Nephtys sinensis sp. n. Che-Foo, China, FAUVEL Bull. Mus. Hist. nat. Paris (2) 4 1932 pp. 536-537 fig. 1 a-k.—*N. digitifera* sp. n. Gier Exped., AUGENER Zool. Meded. Leiden 15 1933

pp. 210-211 fig. 2.—*N. inermis* Ehlers, Gulf of Suez, FAUVEL Mem. Inst. Egypte 21 1933 pp. 47-50 fig. 3.

Nereis disparsetosa pp. 907-909 figs. 1-5, *decora* pp. 909-911 figs. 6-11, spp. n. Brazil, TREADWELL Rev. Mus. Paul. 17 1932.—*N. chingrighattensis*, India, pp. 90-91 fig. 14, *talchapsensis*, Gulf of Siam, pp. 93-94 pl. ii figs. 10-17, spp. n., FAUVEL Mem. Ind. Mus. Calcutta 12 1932.—*N. unifasciata* Willey, Banda, pp. 248-250, *trifasciata* Gr., Samoa, etc., pp. 250-253, *goajirana* sp. n. Goajira, pp. 253-257 fig. 5, (*Ceratonereis*) *microcephala* Gr., Amboina, pp. 257-259 fig. 6, AUGENER Zool. Meded. Leiden 15 1933.—*N. zonata* Mgr. var. *persica* Fauvel, Gulf of Suez, FAUVEL Mem. Inst. Egypte 21 1933 pp. 55-56.—*N. vitabunda* p. 71 fig. 12, *belawanensis* p. 72 fig. 13, *tenuipalpa* pp. 72-74 fig. 14 spp. n. Dutch East Indies, PFLUGFELDER Zool. Anz. Leipzig 105 1933.—*N. (Ceratonereis) microcephala* Gr., Amboina, AUGENER Zool. Meded. Leiden 15 1933 pp. 257-259 fig. 6.—*N. (C.) flagellipes* sp. n. Ganjam coast, FAUVEL Mem. Ind. Mus. Calcutta 12 1932 pp. 100-101 pl. iii figs. 1-8.—*N. (C.) karadagica* sp. n. Black Sea, WINOGRADOW Int. Rev. Hydrobiol. Leipzig 28 1933 pp. 469-473 3 figs.—*N. (Perinereis) vallata* Gr. p. 107, *striolata* Gr. p. 108 fig. 7, *camiguina* Gr. p. 110, *quatrefagesi* Gr. p. 111 fig. 8, *tobeloana* sp. n. Indo-Malaya pp. 116-118 fig. 10, AUGENER Zool. Meded. Leiden 16 1933 [vide etiam *Perinereis*].

Nicodion vide *Eunice*.

Nicola sinensis sp. n. Che-Foo, China FAUVEL Bull. Mus. Hist. nat. Paris (2) 4 1932 p. 537.—*N. cetrata* var. *galapagensis* Chamb., Galapagos Is., AUGENER Nyt Mag. Naturv. Oslo 73 1933 pp. 65-66.

Ninoë chilensis Kinb., Bay of Bengal, FAUVEL Mem. Ind. Mus. Calcutta 12 1932 p. 160 pl. vii fig. 18.

†*Nothrites* gen. n. Onuphididae, *elegans* p. 1205 *gratus* p. 1206 spp. n. Middle Ordovician, Minnesota, STAUFFER Bull. Geol. Soc. Amer. Washington 44 1933.

Odontosyllis enopla Verrill, intestine and nephridia, GOODRICH Quart. J. Micr. Sc. London 76 1933 pp. 319-329 12 figs.

†*Oeonites dignus* p. 1185, *excelsus*, *magnificus*, *inornatus* p. 1186, *paratus*, *propinquus*, *recurvus* p. 1187, *sceleratus*, *spiculatus*, *subquadratus* p. 1188, *tacitus* p. 1189 figs. spp. n. Middle Ordovician, Minnesota, STAUFFER Bull. Geol. Soc. Amer. Washington 44 1933.

Onuphis notialis Monro, Antarctic, AUGENER Sci. Res. Norwegian Antarc. Exped. 1927-28 1932 ix pp. 37-38.—*O. investigatoris* sp. n., Persian Gulf, etc., FAUVEL Mem. Ind. Mus. Calcutta 12 1932 pp. 147-148 text-fig. 21 pl. vi figs. 1-6.

Opisthosyllis nuchalis Verr., Florida, MONRO Ann. Mag. Nat. Hist. London (10) 12 1933 pp. 254-256 fig. 7.

†*Palaeonereites* gen. n. Nereidae, *cervicornis* sp. n. Middle Ordovician, Minnesota, STAUFFER Bull. Geol. Soc. Amer. Washington 44 1933 p. 1200 pl. lxi.

Panthalis oerstedii Kinb., Bay of Bengal, FAUVEL Mem. Ind. Mus. Calcutta 12 1932 pp. 39-41 fig. 7.

Paralacydonia paradoxa Fauvel, Gulf of Suez, FAUVEL Mém. Inst. Égypte 21 1933 p. 46 fig. 2.

Paramphinome indica sp. n. India, FAUVEL Mem. Ind. Mus. Calcutta 12 1932 pp. 51-54 pl. i figs. 9-16.

Pectinaria (Lagis) abbranchiata sp. n. Cochin, FAUVEL Mem. Ind. Mus. Calcutta 12 1932 pp. 215-216 pl. viii figs. 10-14.

Perinereis falsovariegata sp. n. pp. 492-495 figs. 4-6, *capensis* (Kinb.) pp. 495-498 figs. 7-11, South Africa, MONRO Ann. Mag. Nat. Hist. London (10) 11 1933 [vide etiam *Nereis*].

Phyllocomus crocea Grube, Märtha Land, Antarctic, AUGENER Sci. Res. Norwegian Antarc. Exped. 1927-28 1932 ix pp. 82-83 fig. 10.

Pilargis berkeleyi sp. n. Friday Harbour, Washington, MONRO Ann. Mag. Nat. Hist. London (10) 12 1933 pp. 673-675 4 figs.

Pista spinifera Ehl., Antarctic, AUGENER Sci. Res. Norwegian Antarc. Exped. 1927-28 1932 ix pp. 60-62 fig. 5.—*P. typha* Gr., Bay of Bengal, p. 226 text-fig. 36, *robustiseta* Caull. Gulf of Oman, p. 227 text-fig. 37, *fasciata* (Gr.), Bay of Bengal p. 228 text-fig. 38, *macrolobata* Hessle p. 229

text-fig. 39, *pachybranchiata* sp. n., Laccadive Sea, pp. 231-232 pl. ix figs. 1-6, FAUVEL Mem. Ind. Mus. Calcutta 12 1932.

Podarke didymocera Schm., Gier Exped., AUGENER Zool. Meded. Leiden 15 1933 pp. 226-227 fig. 4.

Polyodontes maxillosus Ranz., Bay of Bengal, pp. 35-37 text-fig. 5, *melanotus* Gr., Ceylon, pp. 37-39 fig. 6, FAUVEL Mem. Ind. Mus. Calcutta 12 1932.

Pomatostegus stellatus Abildg., Curaçoa, AUGENER Bijdr. Dierk. Amsterdam 25 1927 p. 79 fig. 7.

Potamilla antarctica Kinb. p. 68, var. *christenseni* var. n. pp. 69-70, AUGENER Sci. Res. Norwegian Antarc. Exped. 1927-28 1932.—*P. stichophthalmos* (Grube), Gulf of Suez, FAUVEL Mém. Inst. Égypte 21 1933 p. 74 fig. 6.

Proceræa picta Ehlers, head appendages, pp. 647-653 figs. 2, 5, 6a, *scapularis* p. 652 fig. 6b, OKADA J. Mar. Biol. Ass. Plymouth n.s. 18 1933.

†*Pronereites* gen. n. Nereidae, *primus* sp. n., Middle Ordovician, Minnesota, STAUFFER Bull. Geol. Soc. Amer. Washington 44 1933 p. 1201 pl. lxi fig. 2.

†*Protarabellites* gen. n. Eunicidae, *concavus* (type) *delectus*, *dubius* p. 1190, *fidelis*, *glenwoodensis*, *grandis* p. 1191, *humilis*, *intermedius*, *maturensis* p. 1192, *productus* p. 1193 figs. spp. n. Middle Ordovician, Minnesota, STAUFFER t.c.

Pseudeurythoe gen. n. Amphinomidae, *paucibranchiata* Gulf of Suez p. 47 pl. i figs. 3, 4, *microcephala* Maldive Islands p. 49 figs. 5-8 spp. n., FAUVEL Mem. Ind. Mus. Calcutta 12 1932.

Pseudosyllides gen. n. Syllidae, *curaçaoensis* sp. n., Curaçoa, AUGENER Bijdr. Dierk. Amsterdam 25 1927 pp. 53-56 fig. 3.

†*Rhabdochitina* ? *minnesotensis* sp. n. Decorah shale, Minnesota, STAUFFER Bull. Geol. Soc. Amer. Washington 44 1933 p. 1209 pl. ix fig. 39.

Sabellaria cementarium Moore p. 209 text-fig. 34, *pectinata* var. *intermedia* var. n. p. 210 text-fig. 35, India, FAUVEL Mem. Ind. Mus. Calcutta 12 1932.

Salmacina incrustans Clap., Curaçoa, AUGENER Bijdr. Dierk. Amsterdam 25 1927 p. 81 fig. 9.

Scalisetosus levis Marenzeller, Gulf of Suez, FAUVEL Mém. Inst. Égypte 21 1933 pp. 38–40 fig. 1.

Schistocomus hiltoni Chamberlin, Madras coast, FAUVEL Mem. Ind. Mus. Calcutta 12 1932 p. 219 pl. viii figs. 15–19.

Sclerocheilus minutus (Grube) Banyuls Bay, NAVILLE Ann. Sci. nat. Paris (10) 16 1933 pp. 202–205 figs. 18, 19.

Scolecopsis vanderhorsti sp. n., Curacoa, AUGENER Bijdr. Dierk. Amsterdam 25 1927 pp. 64–66 fig. 5.

†*Scolithus linearis* Haldeman, Lower Cambrian, Greenland, POULSON Medd. Grønland 87 vi 1932 p. 27 pl. vi fig. 3.—Sandstone, Sweden, WESTERGÅRD Sverig. geol. Undersökn. Årsb. 25 v 1931 pp. 14–16 pls. vii–x.

Scoloplos kerguelensis McInt., India, pp. 165–167, *latus* (Chamberlin), Bay of Bengal, pp. 167–169 text-fig. 28, FAUVEL Mem. Ind. Mus. Calcutta 12 1932.

†*Serpula articulata* Sow., Cretaceous, Northwest Germany, EICHENBERG Z. deutsch. geol. Ges. Berlin 84 1932 p. 503 fig. 2.—†*S. colligata* sp. n. Turkestan, BÖHM Z. deutsch. geol. Ges. Berlin 85 1933 p. 100 pl. ix fig. 4.

Sphaerodorum philippii Fauv. var. *malayana* var. n., Banda, AUGENER Zool. Meded. Leiden 15 1933 pp. 243–245.—*S. balticum* sp. n. and general morphology of genus, REIMERS Zool. Jahrb. Jena (Syst.) 64 1933 pp. 49–105 45 figs.

Sphaerosyllis papillifera sp. n., Banyuls Bay, NAVILLE Ann. Sci. nat. Paris (10) 16 1933 pp. 185–190 figs. 9–12.

Spirobranchus giganteus Pall., Curacoa, AUGENER Bijdr. Dierk. Amsterdam 25 1927 pp. 76–77 fig. 6.

Spirographis braziliensis sp. n. Brazil, TREADWELL Rev. Mus. Paul. 17 1932 pp. 912–913 figs. 15–19.

Spirorbis perrieri Caull. & Mesn. p. 72 fig. 6, *patagonicus* Caull. & Mesn. pp. 73–75 fig. 7, *aggregatus* Caull. & Mesn. p. 75 fig. 8, *Spirorbis* sp. p. 76 fig. 9, AUGENER Sci. Res. Norwegian Antarc. Exped. 1927–28 1932 ix.

†*Staurocephalites acutidentatus* p. 1207, *antiquus*, *dentatus* p. 1208 figs., spp. n. Middle Ordovician, Minnesota, STAUFFER Bull. Geol. Soc. Amer. Washington 44 1933.

Staurocephalus kefersteini (McIntosh) Banyuls Bay, NAVILLE Ann. Sci. nat. Paris (10) 16 1933 pp. 198–201 figs. 16, 17.

Sthenelais boa (Johnst.), Florida, MONRO Ann. Mag. Nat. Hist. London (10) 12 1933 p. 246 fig. 1.

Stylarioides kerguelarum McInt., Peter Island, Antarctic, AUGENER Sci. Res. Norwegian Antarc. Exped. 1927–28 1932 ix p. 52 fig. 4.—*S. bengalensis*, India, pp. 180–182 text-fig. 30, *bifidus*, Arabian Sea, pp. 182–184 text-fig. 31 pl. vii figs. 15–16 spp. n., FAUVEL Mem. Ind. Mus. Calcutta 12 1932.

Syllis tigrinoides Aug. pp. 247–249 fig. 2, *corallicola* Verr. p. 249 fig. 3, *fuscoturata* Aug. p. 250 fig. 4, *tortugaensis* Aug. p. 251 fig. 5, *cinnamata* pp. 252–254 fig. 6, Florida, MONRO Ann. Mag. Nat. Hist. London (10) 12 1933.—*S. (Haplosyllis) depressa* Augener, Gulf of Suez, FAUVEL Mém. Inst. Égypte 21 1933 pp. 50–52 fig. 4.—*S. (Synsyllis) gracilis* Gr., Jamaica and Gier Exped., AUGENER Zool. Meded. Leiden 15 1933 pp. 230–231.

Synsyllis vide *Syllis*.

Talesapia gen. n. incert. sed., *annandalei* sp. n., Gulf of Siam, FAUVEL Mem. Ind. Mus. Calcutta 12 1932 pp. 251–252 pl. ix figs. 13–20.

†*Thalenessites* gen. n. Sigalionidae, *lobatus* sp. n. Middle Ordovician, Minnesota, STAUFFER Bull. Geol. Soc. Amer. Washington 44 1933 pp. 1206–1207 pl. ix.

Thelepus cinnamatus (Fabr.), Andaman Is., FAUVEL Mem. Ind. Mus. Calcutta 12 1932 pp. 233–234 text-fig. 40.

Thormora vide *Lepidonotus*.

Tomopteris (T.) *Cavallii* Rosa p. 379 fig. 3, *Eischscholtzi* Greeff p. 380 fig. 4, *tenuis* pp. 380–381 fig. 5, *poliglandulata* pp. 382–383 fig. 6–8, (*Johnstonella*) *espansa* pp. 374–375 fig. 1, *marginata* pp. 376–378 fig. 2 spp. n. Bay of Naples, CAROLI Pubbl. Staz. Zool. Napoli 12 1933.

Travisia arborifera sp. n., Indian Ocean, FAUVEL Mem. Ind. Mus. Calcutta 12 1932 pp. 191-193 text-fig. 33.
—*T. japonica* sp. n. Japan, FUJIWARA J. Sc. Hiroshima Univ. (Zool.) 2 1933 pp. 99-103 2 pls.

Travisopsis opaca Ehl., AUGENER Zool. Meded. Leiden 15 1933 pp. 221-224 fig. 4 bis.

Trypanosyllis gigantea McInt., South Sandwich Is., AUGENER Sci. Res. Norwegian Antarc. Exped. 1927-28 1932 ix pp. 29-31.

† *Ungulites* gen. n. Nereidae, *aculeatus* p. 1201, *bicuspidatus*, *hystricosus*, *tridentatus* p. 1202 figs., spp. n. Middle Ordovician, Minnesota, STAUFFER Bull. Geol. Soc. Amer. Washington 44 1933.

Vanadis antarctica McInt. Antarctic. AUGENER Sci. Res. Norwegian Antarc. Exped. 1927-28 1932 ix pp. 27-28.—*V. formosa* Clap., Indian and Atlantic Oceans, AUGENER Zool. Meded. Leiden 15 1933 pp. 217-219.

MYZOSTOMIDA.

Mesomyzostoma katoi sp. n. in gonad of Crinoid, *Comanthus japonicus*, Sea of Japan, OKADA Annot. zool. japon. Tokyo 14 1933 pp. 185-189 pl. viii.

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Oligochaeta, general account, STOLTE Bronns Klassen und Ordnungen des Tierreichs Leipzig 4 1933 iii 1 pp. 1-160 160 figs.

Amyntas bosschae Bedd. renamed *Pheritima baruana* nom. n., *kelantanensis* Bedd. syn. of *P. houletti* (Perr.), *cingulatus* Bedd. syn. of *P. indica* (Horst), STEPHENSON Ann. Mag. Nat. Hist. London (10) 9 1932 pp. 201-240.

Aulophorus caraibicus sp. n. South America, MICHAELSEN Zool. Jahrb. Jena (Syst.) 64 1933 pp. 338-341 figs. 7-9.

Bimastus ducis sp. n. N. Carolina, STEPHENSON Proc. Zool. Soc. London 1932 1933 p. 939.

Branchiura sowerbyi Bedd., Buckeye Lake, Ohio, SPENCER Trans. Amer. Micr. Soc. Menasha 51 1932 pp. 267-272.

Bülteriodrilus haasi sp. n., South Africa, MICHAELSEN Abh. senckenb. naturf. Ges. 40 1933 pp. 419-423 figs. 3-5.

Cambarincola okadai sp. n. on crayfish, YAMAGUCHI Proc. Imp. Acad. Tokyo 9 1933 p. 191 2 figs.

Carcinodrilus gen. n. *nipponicus* sp. n. attached to *Cambaroides japonicus*, Japan, YAMAGUCHI J. Fac. Sc. Hokkaido, Zool. 2 1932 pp. 61-67 2 text-figs. 1 pl.

Chilota bicinctus (Bedd.) pp. 280-282, *patagonicus* (Kinb.) p. 282 figs., PICKFORD "Discovery" Reports Cambridge 4 1932.

Dero heterobranchiata pp. 332-335 fig. 2, *bonairiensis* pp. 336-338 figs. 3-6 spp. n. South America, MICHAELSEN Zool. Jahrb. Jena (Syst.) 64 1933.

Dichogaster foetida sp. n. Belgian Congo, MICHAELSEN Bull. Mus. Hist. Nat. Belg. 8 1932 no. 25 5 pp. 8 figs.—*D. bolawi* (Mich.) var. (innom.), PICKFORD "Discovery" Reports Cambridge 4 1932 pp. 286-287 figs. 2 j-l.—*D. flagellifera* pp. 225-229 figs. 1-2, *kigogoana* pp. 232-233 figs. 4-6, *loveridgei* pp. 234-237 figs. 7-8, *rungweensis* pp. 237-241 figs. 9-10 spp. n., *itolensis* (Mich.) var. *minor* var. n. pp. 229-231 fig. 3, Tanganyika territory, STEPHENSON Bull. Mus. Comp. Zool. Harvard 75 1933.

Didymogaster sylvaticus Fletch., New South Wales, STEPHENSON Proc. Zool. Soc. London 1932 1933 pp. 919-922 figs. 16, 17.

Diplocardia michaelsoni Eisen, N. Carolina, STEPHENSON Proc. Zool. Soc. London 1932 1933 pp. 930-934 figs. 24, 25.

Diporochaeta davallia W. B. Sp. pp. 924-927 figs. 19, 20, *apiocystis* sp. n. pp. 928-930 figs. 21-23, Victoria, STEPHENSON Proc. Zool. Soc. London 1932 1933.

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Drilocrius hummelincki sp. n. S. America, MICHAELSEN Zool. Jahrb. Jena (Syst.) 64 1933 pp. 344-349 fig. 11.

Eisenia veneta (Rosa), Surrey, pp. 934-935 figs. 26, 27, *lönnerbergi* (Mich.) N. Carolina p. 935, *pearsei* sp. n. N. Carolina pp. 936-938 fig. 28, STEPHENSON Proc. Zool. Soc. London 1932 1933.

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Enchytraeus australis pp. 258-260 figs. 9-11, *colpites* pp. 260-263 figs. 12, 13, spp. n., STEPHENSON "Discovery" Reports Cambridge 4 1932.—*E. fonteinensis* sp. n. (?) South America, MICHAELSEN Zool. Jahrb. Jena (Syst.) 64 1933 pp. 342-344 fig. 10.

Eophila augilensis sp. n. Oasis of Augila, Cirenaica, N. Africa, SCIACCHITANO Ann. Mus. Stor. nat. Genova 55 1932 pp. 302-303.

Fridericia Stephensoni sp. n., Poland, MOSZYŃSKI C.R. Acad. Cracovie 1932 x p. 6, Bull. int. Acad. Cracovie 1932 B II pp. 363-367 7 figs.

Gardullaria angolana sp. n. South Africa, MICHAELSEN Abh. senckenb. naturf. Ges. 40 1933 pp. 423-427 figs. 6, 7.

Gordiodrilus buykerleni Mich. var. *thomsoni* var. n. South-West Africa, MICHAELSEN Abh. senckenb. naturf. Ges. 40 1933 pp. 427-428.

Hystricosoma insularum sp. n. S. America, MICHAELSEN Zool. Jahrb. Jena (Syst.) 64 1933 pp. 329-331 fig. 1.

Lumbricillus lineatus (Müll.) p. 251, *maximus* (Mich.) pp. 252-254 fig. 6, *macquariensis* Benham pp. 254-255 fig. 7, *antarcticus* sp. n. pp. 256-257 fig. 8, STEPHENSON "Discovery" Reports Cambridge 4 1932.—*L. pumilio* sp. n. on *Ascophyllum* and *Polysiphonia*, Plymouth, STEPHENSON Proc. Zool. Soc. London 1932 1933 pp. 902-904 figs. 1-3.

Lumbricus rubellus tristani var. n. Tristan da Cunha, PICKFORD "Discovery" Reports Cambridge 4 1932 p. 289.

Lycodrilus kraepelini Mich. transferred to *Pelodrilus*, HRABĚ Zool. Anz. Leipzig 104 1933 pp. 225-228 1 fig.

Marionina georgiana (Mich.), South Georgia, pp. 241-243 figs. 1-3, *grisea*, Palmer Arch., pp. 243-246 figs. 4-5, *aestrum*, South Georgia, pp. 246-251 spp. n., STEPHENSON "Discovery" Reports Cambridge 4 1932.

Megascolex inermis sp. n. Victoria, STEPHENSON Proc. Zool. Soc. London 1932 1933 pp. 914-916 fig. 14.

Michaelsona monochaeta (Mich.), STEPHENSON "Discovery" Reports Cambridge 4 1932 p. 263 fig. 14.

Microchaetus timmianus sp. n., South Africa, MICHAELSEN Abh. senckenb. naturf. Ges. 40 1933 pp. 429-432.

Microscolex falcandicus (Bedd.) pp. 269-272, *aquarumdulcium* (Bedd.) pp. 273-274, *georgianus* (Mich.) pp. 275-277 f. *reductus* form. n. p. 277, *michaelsoni* Bedd. *hermitensis* subsp. n. pp. 278-280 figs., PICKFORD "Discovery" Reports Cambridge 4 1932.

Notoscolex birmanicus Gates p. 367, *depressus* Gates p. 368, *lunatus* Gates p. 369, *triquetrus* sp. n. pp. 370-372 fig. 2, Burma, GATES Rec. Ind. Mus. Calcutta 34 1932.

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VII. BRACHIOPODA AND BRYOZOA

(a) BRACHIOPODA

BY

H. M. MUIR-WOOD, M.Sc.

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Silurian.—Yorkshire, KING, 67; England, BOOKER, 12; Hungary, VÁS-CÁPUANU, 126; Ural Mts., MASHKOVZEV, 79; Burma, REED, 104; Canada, CRICKMAY, 25; U.S.A., BALL, 7; Australia, THOMAS, 124; BOOKER, 12; EDWARDS, 31.

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ORTHACEA.

BILLINGSSELLIDAE.

†*Billingsella coloradoensis* figured, SELLARDS 114 pl. ii.—*B. goettschei* sp. n. p. 93, *hsishanensis* sp. n. p. 94 Cambrian Korea, KOBAYASHI Jap. J. Geol. Geogr. Tokyo 11 1-2.

EOORTHIDAE.

†*Eoorthis remnichia texana, wichitaensis* figured, SELLARDS 114 pl. ii.—*E. pagoda, pagodiformis* sp. n. p. 94 Cambrian Korea etc., KOBAYASHI Jap. J. Geol. Geogr. Tokyo 11 1-2.

PLECTORTHIDAE.

†*Finkelnburgia* (?) *manchurica* sp. n. Cambrian Korea, KOBAYASHI Jap. J. Geol. Geogr. Tokyo 11 1-2.

†*Hebertella* diagnosed, striae of p. 379, *latistriata* sp. n. p. 380, *imperator* p. 381, Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.

†*Platystrophia amoena longicardinalis*, WILSON 135 p. 389.—*P. biforata* var. *fissicostata* figured, VASCĂUTANU 126 p. 567.

†*Plectorthis mazourkaensis* sp. n. p. 9, *patulus* sp. n. p. 10 Ordovician U.S.A., PHLEGER Bull. S. Calif. Acad. Sci. 32 1.

ORTHIDAE.

†*Apatorthidae* fam. n. for *Apatorthis* gen. n. Ordovician Esthonia, ÆPIK Acta Comm. Univ. Tartu A 25 1 p. 5.

†*Apatorthis* gen. n. p. 5, type *A. punctata* sp. n. p. 8, *tenuicosta* p. 9, *inflata* sp. n., *jugata* sp. n. p. 10, *ultima* sp. n. p. 11 Ordovician Esthonia, ÆPIK Acta Comm. Univ. Tartu A 25 1.

†*Cyrtototella kukersiana* figured interior brachial valve, ÆPIK 88 p. 60.

†*Orthis circularis* p. 11 figured, WILSCHOWITZ 134.—*O. calligramma* var. *virgata* figured p. 566, VASCĂUTANU 126.—*O.* cf. *irradica* p. 191, REED 104.—*O. minusculus* sp. n. p. 7, *decipiens* sp. n. p. 17, Ordovician U.S.A., PHLEGER Bull. S. Calif. Acad. Sci. 32 1.—*O. resupinata* p. 82, *melchlini* p. 83, PFAB 94.—*O.* described and figured, DOUGLAS 28 p. 343.

†*Orthis* (*Glyptorthis*) cf. *lamellosa*, REED 104 p. 193.

†*Orthis* (*Nicolella*) *praetor*, REED 104 p. 192.

†*Paurorthidae* fam. n. p. 11 for *Paurorthis*, ÆPIK Acta Comm. Univ. Tartu A 25 1.

†*Paurorthis parva* p. 12, figured, ÆPIK 89.

†*Yeosinella* gen. n. type *Y. consignata* sp. n. Ordovician Burma, REED Rec. Geol. Surv. Ind. 66 2.

DINORTHIDAE.

†*Dinorthis strathmorica* sp. n. Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.—*Orthis* (*D.* ?) sp., REED 104 p. 192.

†*Leptestinae* subfam. n. for *Palaeostrophomena* emend., ÆPIK Acta Comm. Univ. Tartu A 24 7 p. 24.

†*Palaeostrophomena* nov. emend. p. 24, *concava* p. 25, ÆPIK 88.—*P.* genus discussed p. 35, *concava* p. 36, ÆPIK 87.

CLITAMBONACEA.

CLITAMBONITIDAE.

†*Clitambonites* ? *parva* sp. n. p. 383, Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.

†*Kullervo* gen. n. type *Gonambonites panderi* ÕPIK Ordovician Esthonia, ÕPIK Acta Comm. Univ. Tartu A 23 3 p. 70.

†*Rauna* gen. n. type *Orthisina* ? *yanischewskyi* Lessnikow 1924 Ordovician Esthonia, ÕPIK Acta Comm. Univ. Tartu A 23 3 p. 70.

DALMANELLACEA.

DALMANELLIDAE.

†*Dalmanella millepunctata* sp. n. p. 389 Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.—*D. testudinaria* p. 567, VASCÅUTANU 126.—*Orthis* (D.) *emancipata* sp. n. p. 182 Ordovician, *mansuyi* p. 207 Silurian Burma, REED Rec. Geol. Surv. Ind. 66 2.

†*Onniella navis* p. 16, *navicula* sp. n. p. 17, Ordovician Esthonia, ÕPIK Acta Comm. Univ. Tartu A 25 1.

†*Onniellidae* nom. n. for *Dalmanellidae* Schuchert 1929 emend., in Schuchert & Cooper for *Onniella*, ÕPIK Acta Comm. Univ. Tartu A 25 1 p. 14.

BILOBITIDAE.

†*Orthis biloba* (*Bilobites*) = *Dicoelosia* figured, WILSCHOWITZ 134 p. 18.

RHIPIDOMELLIDAE.

†*Rhipidomella vanuxemi newalbanensis* var. n. p. 308 Devonian U.S.A., SCHUCHERT Amer. J. Sci. New Haven 25 148.—*R.* diagnosed, *carbonaria* p. 52, DUNBAR & CONDRA 29.—*Orthis* (R.) *penniana* p. 527, REED 101.

SCHIZOPHORIIDAE.

†*Enteleles retardata* sp. n. p. 7, Permian China, HUANG Palaeont. sinica B 9 2.—*E.* diagnosed p. 59, *hemiplicatus* p. 60, *h. plattsburgensis* p. 63, *pugnoides* p. 64, DUNBAR & CONDRA 29.—*E. acutiplicatus* sp. n. p. 23, Upper Carboniferous Japan, HAYASAKA Mem. Fac. Sci. Agric. Taihoku Imp. Univ. Formosa 6 2.

†*Orthotichia japonica* p. 20, subsp. *striata* subsp. n. p. 22 Upper Carbonifer-

ous Japan, HAYASAKA Mem. Fac. Sci. Agric. Taihoku Imp. Univ. Formosa 6 2.—*O. marmorea*, sp. p. 6, HUANG 60.

†*Parenteleles sinensis* sp. n. p. 10, mut. *zigzag* mut. n. p. 13, mut. *transversus* mut. n. p. 14 Permian China, HUANG Palaeont. sinica B 9 2.

†*Schizophoria* (*Orthis*) *provulvaria* p. 14, WILSCHOWITZ 134.—*S.* diagnosed p. 54, *resupinoides* p. 56, *oklahomae* sp. n. p. 58 Upper Carboniferous U.S.A., DUNBAR & CONDRA Bull. Geol. Surv. Nebraska 5.—*S. resupinata* figured, SCHMIDT 112 p. 26.—*Orthis* (S.) *subquadrata* p. 38, REED 102.—*Orthis* (S.) *resupinata* cf. var. *latirostrata* described, REED 101 p. 528.—*S. iowensis* p. 210, NALIVKIN 84.—*S. parenteleleiformis* p. 1, *rhomboidalis* p. 3, *tani* p. 4 spp. n. Permian China, HUANG Palaeont. sinica B 9 2.—*S. striatula* p. 73 figured, HOSKING 59.—*S. peculiaris* sp. n. Carboniferous U.S.A., Girty J. Wash. Acad. Sci. 21 p. 390.—*Orthis* (S.) *resupinata* p. 3, figured, AIGNER 1.

TROPIDOLEPTIDAE.

†*Tropidoleptus carinatus*, sp. var. *rhenana* ? figured, WILSCHOWITZ 134 p. 14.

SUBORDER PENTAMEROIDEA.

SYNTROPHIACEA.

HUENELLIDAE.

†*Huenella sexplicata* sp. n. p. 95 Cambrian Korea, KOBAYASHI Jap. J. Geol. Geogr. Tokyo 11 1-2.—*H.* (?) *wanwanensis* sp. n. Ordovician Manchuria, KOBAYASHI J. Fac. Sci. Univ. Tokyo Geol. Min II 3 7 p. 259.—*H. texana* figured, SELLARDS 114 pl. ii.

PENTAMERACEA.

CAMARELLIDAE.

†*Camarella* sp. figured, STRAND 121 p. 357.—*C.* sp., REED 103 p. 98.

PENTAMERIDAE.

†*Barrandella linguifer* serial sections p. 340, (*Barrandina*) *wilkinsoni*, minor figured p. 342, BOOKER 12.

†*Camarophoria* cf. *nucula* p. 94, REED 103.—*C. nucula* var. *saxatilis* var. n. p. 35, Permian India, REED Palaeont. indica 17.

†*Salonia* gen. n. type *S. magnaplicata* sp. n. p. 500 Ordovician U.S.A., COOPER & WHITCOMB J. Wash. Acad. Sci. 23 11.

†*Seminula callytharrensensis* sp. n. p. 50 Permo-Carboniferous W. Australia, HOSKING J. Roy. Soc. W. Australia 19.

†*Sieberella galeata* figured, BOOKER 12 pl. vi.

STROPHOMENACEA.

STROPHOMENIDAE.

†*Aegiria* gen. n. type *A. norvegica* sp. n. p. 55, Ordovician Norway, ÕPIK Acta Comm. Univ. Tartu A 24 7.

†*Ahtiella* gen. n. type *A. lirata* sp. n. p. 37, *baltica* sp. n. p. 42, sp. a. aff. *baltica* p. 44 Ordovician Esthonia, ÕPIK Acta Comm. Univ. Tartu A 23 3.—*A. baltica*, *arenaria* sp. n. p. 19, Ordovician Esthonia, ÕPIK Acta Comm. Univ. Tartu A 24 7.

†*Ahtiellinae* subfam. n. for *Ahtiella*, ÕPIK Acta Comm. Univ. Tartu 24 7 p. 19.

†*Chonetoidea* discussed p. 51, *iduna* sp. n. p. 52, Ordovician Norway, ÕPIK Acta Comm. Univ. Tartu A 24 7.

†*Christiania* cf. *tenuicincta* p. 98, REED 103.

†*Derbyia grandis*, *shanensis* p. 86, ? sp. p. 120, REED 103.—*D.* diagnosed p. 75, *crassa* p. 79, var. *richmonda* p. 83, var. *subcircularis* var. n., var. *texana* var. n. p. 84, *bennetti* p. 85, var. *broadheadi* p. 89, *deercreekensis* sp. n. p. 90, *hooserensis* sp. n. p. 92, var. *elliptica* var. n. p. 94, *wabaunseensis* sp. n. p. 95, *cymbula* p. 97, *multistriata* p. 101, *ciscoensis* sp. n. p. 104, *plattsmouthensis* sp. n. p. 106, *jacksboroensis* sp. n. p. 108, *kansasensis* sp. n. p. 109, *haesitans* sp. n. p. 110, *robusta* p. 112, Upper Carboniferous U.S.A., DUNBAR & CONDRA Bull. Geol. Surv. Nebraska 5.—*D. buchi* described, REED 101 p. 528.—*D.* sp., PFAB 94 p. 84.—*D.* sp. ex gr. *waageni* p. 17, 40, *magna* sp. n. p. 18, 40, var. *auriculata* var. n., *anomala* sp. n. p. 20, 42, sp. indet. p. 22, 43 Permian Caucasus, LICHAREW Trans. Geol. Prosp. Serv. U.S.S.R. 215.—*D. gigantea* p. 4, figured, AIGNER 1.

†*Derbyoides* gen. n. type *D. nebrascensis* sp. n. p. 114, 115, Upper Carboniferous U.S.A., DUNBAR & CONDRA Bull. Geol. Surv. Nebraska 5.

†*Ingria* genus discussed p. 13, *nefedyevi* p. 17, sp. a. aff. *nefedyevi* p. 21, *flabellum* sp. n. p. 22, *pakriana* sp. n. p. 23, sp. b. aff. *pakriana*, *expressa* sp. n. p. 29, sp. c. aff. *expressa* p. 31, *aka* sp. n. p. 32 Ordovician Esthonia, ÕPIK Acta Comm. Univ. Tartu A 23 3.

†*Inversella* gen. n. type *I. borealis* sp. n. p. 21, *angulata* sp. n. p. 23, Ordovician Esthonia, ÕPIK Acta Comm. Univ. Tartu A 24 7.

†*Kiangsiella pectiniformis* figured, HUANG 60 p. 21.

†*Leangella* gen. n. type *Plectambonites scissa triangularis* Høltedahl = *Leptelloidea scissa* O. T. Jones, *triangularis* p. 42, Ordovician Norway, ÕPIK Acta Comm. Univ. Tartu A 24 7.

†*Leptaena transversalis* sp. n. p. 394 Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.

†*Leptelloidea yeosinensis* sp. n. p. 196 Ordovician Burma, REED Rec. geol. Surv. Ind. 66 2.—*L.* p. 30, *leptelloides* p. 32, *musca* p. 34, ÕPIK 88.

†*Leptelloidea* (*Leangella*) *segmentum* figured, ÕPIK 88 p. 47.

†*Meekella delepinei* sp. n. p. 429, Ur. Carboniferous Persia, RIVIÈRE Bull. Soc. géol. Fr. 2.—*M.* diagnosed p. 124, *striatocostata* p. 125, var. *grandicosta* var. n. p. 129, var. *ventricosa* var. n. p. 130, var. *convexicosta* var. n. p. 131, Upper Carboniferous U.S.A., DUNBAR & CONDRA Bull. Geol. Surv. Nebraska 5.—*M. eximia* p. 22, 43, *multiplicata* sp. n. p. 24, 44, sp. ind. no. 1 p. 25, 45, sp. ind. no. 2 p. 26, 45, Permian Caucasus, LICHAREW Trans. Geol. Prosp. Serv. U.S.S.R. 215.—*M. kueichowensis* sp. n. p. 27, sp. nov. aff. *kueichowensis* p. 28, *abnormalis* sp. n. p. 30, sp. p. 31 Permian China, HUANG Palaeont. sinica B 9 2.—*M.* genus discussed, *gigantea*, p. 26 figured, HAYASAKA 55.

†*Ombonia* gen. emend. p. 26, 45, *O. (Geyerella) tschernyschewi* sp. n. p. 26, 46, var. *latiareata* var. n. p. 27, 47, *dieneri* sp. n. p. 28, 47, var. *minor* var. n. p. 29, 48, *girtyi* nom. n. for *Orthotetes distortus* var. *complanatus* Girty 1908 non Schellwien, aff. *dieneri* sp. n. p. 30, 49, *transversalis* sp. n. p. 31,

49, Permian Caucasus, LICHAREW Trans. Geol. Prosp. Serv. U.S.S.R. 215.—*O. canevai* p. 80, MERLA 80.

†*Orthotetes* cf. *capuloides* p. 89, REED 103.

†*Orthotetina* diagnosed p. 132, *kansasensis* sp. n. p. 132 Upper Carboniferous U.S.A., DUNBAR & CONDRA Bull. Geol. Surv. Nebraska 5.—*O.* discussed p. 30, *planoconvexa* sp. n. p. 32, *eusarkos* subsp. *lata* subsp. n. p. 33, Upper Carboniferous Japan, HAYASAKA Mem. Fac. Sci. Agric. Taihoku Imp. Univ. Formosa 6 2.

†Orthotetinae subfamily discussed, DUNBAR & CONDRA 29.—*O.* classification discussed, AIGNER 1 p. 4.

†*Petroria* cf. *rugosa*, REED 103 p. 98.

†*Plectambonites angulatus* sp. n. p. 18 Ordovician U.S.A., PHLEGER Bull. S. Calif. Acad. Sci. 32 1.—*P.* nov. emend. p. 11, *planissimus* nov. emend. p. 12, *aranea* sp. n. p. 14, *radiatus* p. 15, Ordovician Esthonia, ÖPIK Acta Comm. Univ. Tartu A 24 7.

†Plectambonitidae nov. emend. p. 10, ÖPIK 88.

†Plectambonitinae O. T. Jones nov. emend., ÖPIK 88 p. 11.

†*Plectella uncinata* p. 16, ÖPIK 88.—*P.* genus discussed p. 10, ÖPIK 87.

†*Ptychoglyptus shanensis* sp. n. p. 195 Ordovician Burma, REED Rec. Geol. Surv. Ind. 66 2.

†*Rafinesquina laurentina* sp. n. p. 382 Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.—*R. equipunctata* sp. n. p. 394, *carlottina*, *normalis* spp. n. p. 395, *robusta* sp. n. p. 396, development of p. 397, Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.—*R. dorsata* interior of brachial valve figured, ÖPIK 88 p. 63.

†*Sampo* gen. n. type *S. hiiuensis* sp. n. p. 35, 36, var. *nasuta* var. n., var. *mucronata* var. n. p. 39 Ordovician Esthonia, ÖPIK Acta Comm. Univ. Tartu A 24 7.

†*Schellwienella* sp. figured, SCHMIDT 112 p. 26.—*S. crenistria* recorded, METZ 81 p. 243.—*S. ruber* p. 23, *acutangula* sp. n. p. 24, *regularis* sp. n. p. 25, Permian China, HUANG Palaeont. sinica B 9 2.

†*Schuchertella semiplana*, REED 103 p. 90.—*S.* diagnosed, *pratteni* p. 117, DUNBAR & CONDRA 29.—*S. frechi* sp. n. p. 21, Permian China, HUANG Palaeont. sinica B 9 2.

†*Sowerbyella sericea* p. 392, *subovalis* sp. n. p. 393, Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.—*S.* ? aff. *youngiana*, cf. *ledetensis* p. 197, REED 104.—*S.* n. sp. aff. *sericea* figured, ÖPIK 88 p. 50.

†*Sowerbyellinae* discussed p. 48, ÖPIK 88.

†*Streptorhynchus memor* sp. n. p. 37, Permian India, REED Palaeont. indica 17.—*S. pectiniformis* p. 78, MERLA 80.—*S. pelargonatus* p. 11, 36, aff. *pelargonatus*, *altissimus* sp. n. p. 13, 37, aff. *altissimus* sp. n. p. 14, 38, cf. *hallianus* var. *aplicata* var. n. p. 15, 38, cf. *tingi*, sp. nov. ? p. 16, 39, Permian Caucasus, LICHAREW Trans. Geol. Prosp. Serv., U.S.S.R. 215 1932.—*S.* diagnosed p. 121, *affine* p. 122, DUNBAR & CONDRA 29.—*S. kayseri* p. 15, *pelargonatus* p. 17, var. *lenticularis* p. 18, *minutus* sp. n. p. 19, Permian China, HUANG Palaeont. sinica B 9 2.—*S.* cf. *pelargonatus* p. 87, REED 103.—*S.* sp. p. 25 figured, HAYASAKA 55.—*S.* cf. *kempei* figured p. 16, sp. ind. p. 17, cf. *pelargonatus* p. 22, FREEBOLD 40.

†*Streptorhynchus* (*Kiangsiella*) *pectiniformis* p. 38, REED 102.—*S.* (*Kiangsiella*) *pectiniformis* p. 89, REED 103.

†*Stropheodonta sedgwicki*, sp. cf. *fascigera*, sp. cf. *rudis* p. 10 figured, WILSCHOWITZ 134.—*S. crassistriata* sp. n. (cf. *Strophomena scabrosa*) p. 84 Devonian Germany, FUCHS Jahrb. nassau Ver. Naturk. 80.

†*Strophomena irregularis, expansa* spp. n. p. 398, sp. cf. *S. fluctuosa* p. 399 Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.—*S. corrugatella, assmussi* p. 588, VÄSCĂUȚANU 126.

†*Strophonella dutertrii* var. *siemiradzki* var. n. nom. nud. figured, VÄSCĂUȚANU 126 pl. ix.

†*Tripllicella* gen. n. type *T. duplicata* sp. n. p. 400, Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.

†*Ukoa* gen. n. type *U. ornata* sp. n. p. 33, Ordovician Esthonia, ÖPIK Acta Comm. Univ. Tartu A 23 3.

CHONETIDAE.

†*Chonetella nasuta*, REED 102 p. 19.

†*Chonetes* or *Chonetella* sp. figured, REED 100 p. 43.

†*Chonetes sarcinulata* p. 10, sp. cf. *plebeja*, sp. cf. *extensa*, sp. p. 11 figured, WILSCHOWITZ 134.—*C. yandellianus seymourensis* var. n. p. 309 Devonian U.S.A., SCHUCHERT Amer. J. Sci. New Haven 25 148.—*C.* sp. p. 94, 123, REED 103.—*C.* n. sp. aff. *oblonga* recorded, KUTCHER 73 p. 210.—*C. pygmaea*, cf. *pygmaea* p. 74, *punctata* sp. n. p. 75, Upper Carboniferous Austria, RAKOVEC Prirod. Razpr. Ljubljana 1.—*C. hardrensis, buchiana, papilionacea*, PFAB 94 p. 83.—*C. falklandica* p. 83, *gortanii* sp. n. p. 84 Devonian Argentine, FERUGLIO Giorn. geol. Bologna 5.—*C.* diagnosed p. 136, *granulifer* p. 138, var. *meekanus* p. 143, var. *transversalis* var. n. p. 145, var. *armatus* p. 146 Upper Carboniferous U.S.A., DUNBAR & CONDR A Bull. Geol. Surv. Nebraska 5.—*C. (Chonetes) laquessianus* var. *angusta* p. 10, *longispinus*, sp. (? n. sp.) p. 11, AIGNER 1.—*C. (Chonetes)* cf. *zelteri* p. 26, aff. *illinoisensis* figured p. 27, SCHMIDT 112.

†*Chonetes (Tornquistia)* cf. *politus* figured, SCHMIDT 112 p. 27.

†Chonetidae classification discussed p. 133, DUNBAR & CONDR A 29.

†*Chonetina* diagnosed p. 147, (?) *rostrata* sp. n. p. 150, *flemingi* p. 151, var. *alata* var. n. p. 154, var. *plebeia* var. n. p. 156, var. *crassinodiata* var. n. p. 157, *verneuillianus* p. 158 Upper Carboniferous U.S.A., DUNBAR & CONDR A Bull. Geol. Surv. Nebraska 5.

†*Dienerella* subgen. n. of *Chonetes* type *C. grandicosta* Waagen, *grandicosta* var. *biplex* var. n. p. 18, Permian India, REED Palaeont. indica 17.

†*Lissochonetes* gen. n. type *Chonetes geinitzianus* Waagen (*C. glabra* Geinitz, non Hall) p. 169, 171, *geinitzianus* var. *plattsmouthensis* var. n. p. 173, var. *geronticus* var. n. p. 174, var. *senilis* var. n. p. 175 Upper Carboniferous U.S.A., DUNBAR & CONDR A Bull. Geol. Surv. Nebraska 5.

†*Mesolobus* gen. n. type *Chonetes mesolobus* Norwood & Pratten p. 159, 161, var. *bioderma* var. n. p. 164, var. *decipiens* p. 165, var. *euampygus* p. 167, Upper Carboniferous U.S.A., DUNBAR

& CONDR A Bull. Geol. Surv. Nebraska 5.—*M. mesolobus* p. 109 described, *striatus* sp. n. nom. nud. p. 110, WELLER & McGEHEE 131.

PRODUCTIDAE.

†*Aulosteges* cf. *tibeticus* figured, REED 103 p. 122.—*A. poyangensis* var. *medlicottianus* figured, HUANG 60 p. 92.—*A. baracoodensis* p. 33, var. *septentrionalis* p. 35, *ingens, spinosus*, sp. p. 37, HOSKING 57.

†*Cancrinella* diagnosed p. 257, *boonensis* p. 258, DUNBAR & CONDR A 29.

†*Cf. Chonopectus fischeri* figured, SCHMIDT 112 p. 27.

†? *Daviesiella comoides* p. 34, figured, HAYASAKA 55.

†*Dictyoclostus* diagnosed p. 213, *portlockianus* p. 215, var. *crassicostatus* var. n. p. 217, *americanus* nom. n. for *Productus semireticulatus* American authors in part p. 218, Upper Carboniferous U.S.A., DUNBAR & CONDR A Bull. Geol. Surv. Nebraska 5.—*Productus (D.)* sp. p. 93, REED 103.—*P. (D.) chandlessi* described, REED 101 p. 520.—*P. (D.) nankingensis* p. 87, *gratiosus* p. 88, HUANG 60.

†*Echinoconchus* diagnosed p. 204, *semipunctatus* p. 205, var. *knighti* var. n. p. 208, *moorei* sp. n. p. 209, Upper Carboniferous U.S.A., DUNBAR & CONDR A Bull. Geol. Surv. Nebraska 5.—*Productus (E.) nevadensis* described p. 525, REED 101.—*P. (E.) elegans, punctatus* p. 79 figured, RAKOVEC 99.—*P. (E.) defensus* figured, HAYASAKA 55 p. 37.

†*Juresania* diagnosed p. 192, *nebrascensis* p. 195, *symmetrica* p. 198, *ovalis* sp. n. p. 200, *wilberana* p. 202, Upper Carboniferous U.S.A., DUNBAR & CONDR A Bull. Geol. Surv. Nebraska 5.—*Productus (J.) paraensis* sp. n. p. 523 Ur. Carboniferous Brazil, REED Ann. Mag. Nat. Hist. 11.—*P. (J.) juresanensis* figured p. 24, FIEBOLD 42.

†*Krotovia* diagnosed, *meeki* sp. n. p. 211, Upper Carboniferous U.S.A., DUNBAR & CONDR A Bull. Geol. Surv. Nebraska 5.—*Productus (K.)* cf. *janus* p. 91, REED 103.

†*Leptalosia* gen. n. type *Strophalosia scintella* Beecher p. 260, *spondyliiformis* p. 262, *ovalis* sp. n. p. 263, Upper Carboniferous U.S.A., DUNBAR & CONDR A Bull. Geol. Surv. Nebraska 5.

†*Linoproductus* diagnosed p. 239, *prattenianus* p. 241, *magnispinus* sp. n. p. 244, *nodosus* p. 246, *insinuatus* p. 247, *carinatus* sp. n. p. 248, *canalis* sp. n. p. 250, *oklahomae* sp. n. p. 251, *missouriensis* p. 252, *platyumbonus* sp. n. p. 254, *meniscus* sp. n. p. 255, Upper Carboniferous U.S.A., DUNBAR & CONDRA Bull. Geol. Surv. Nebraska 5. —*Productus* (L.) *lineatus*, REED 102 p. 12.—*P.* (L.) *cora* described, REED 101 p. 523.—*P.* (L.) *cora* p. 77 figured, RAKOVEC 99.—*L. kayseri* figured p. 89, HUANG 60.—*L. cf. L. tenuistriatus* var. *foordi* figured, HOSKING 58 p. 47.—*L. cf. konincki* figured p. 18, FIEBOLD 42.—*L.* genus discussed p. 66, *springsurensis* sp. n. p. 67, Permo-Carboniferous Australia, BOOKER Proc. Roy. Soc. Queens. 43.

†*Marginifera* diagnosed p. 221, *muricata* nom. n. for *Productus muricatus* Norwood & Pratten (non Phillips) and of American authors p. 222, *missouriensis* p. 224, *lasallensis* p. 225, *splendens* p. 228, *haydensis* p. 232, *wabashensis* p. 234, var. *armata* var. n. p. 237, *hystriculata* sp. n. p. 238, *fragilis* sp. n. p. 239 Upper Carboniferous U.S.A., DUNBAR & CONDRA Bull. Geol. Surv. Nebraska 5. —*Productus* (M.) cf. *kweichowensis* figured p. 92, *bivius* sp. n. p. 121 Permo-Carboniferous Burma, REED Rec. Geol. Surv. Ind. 67 1.—*P.* (M.) *semistriatus* var. *brasiliensis* var. n. p. 521 Ur. Carboniferous Brazil, REED Ann. Mag. Nat. Hist. 11.—*P.* (M.) sp. p. 88, HUANG 60.

†*Productidae* discussed, structure, etc., DUNBAR & CONDRA 29 p. 175.

†*Productus missouriensis* sp. n. nom. nud. p. 244, SAYRE 111.—*P.* structure of spines p. 180, classification p. 184, key to genera p. 190, *aequicostatus* p. 264, *americanus* p. 265, *asperus*, *auriculatus*, *calhounianus*, *confragosus* p. 266, *costatoides*, *hepar*, *hildrethianus* p. 267, *magnicostatus* p. 268, *rogersi*, *norwoodi*, *pectinoides*, *tubulospinus* p. 269, DUNBAR & CONDRA 29.—*P. semireticulatus* p. 77, var. *bathykolpos* p. 78, *longispinus* p. 80, figured, RAKOVEC 99.—*P. longispinus*, *punctatus* p. 83, PFAB 94.—*P. abichi*, MERLA 80 p. 86.—*P. semireticulatus* group discussed, HOSKING 58 p. 46.—*P. porrectus*, aff. *konincki* p. 13, aff. *cancriniformis* p. 14, *horridus* var. *hoppeianus* p. 18, sp. p. 19,

horridus var. *initialis* p. 20, var. *granuliferus* p. 21, figured, FIEBOLD 40. —*P. waagenianus* sp. n. p. 69, Permo-Carboniferous Australia, BOOKER Proc. Roy. Soc. Queens. 43.—*P. jasperensis* sp. n. p. 243, Carboniferous Canada, ALLEN, WARREN & RUTHERFORD Trans. Roy. Soc. Can. 26 iv.—Cf. *P.* sp. figured, SCHMIDT 112 p. 28.—*P.* (*Productus*) *indicus*, *asperulus* p. 2, *gratiosus* p. 3, described, REED 102.

†*Productus* (*Avonia*) *derbyi* sp. n. p. 526 Ur. Carboniferous Brazil, REED Ann. Mag. Nat. Hist. 11.—*A. williamsana* sp. n. p. 394, Carboniferous U.S.A., Girty J. Wash. Acad. Sci. 21.

†*Productus* (*Buxtonia*) *punjabensis* sp. n. p. 11, Permian India, REED Palaeont. indica 17.

†*Productus* (*Paramarginifera*) *vihianus* var. *salinaria* var. n. p. 13, *kiangsiensis* var. *tumida* p. 14, Permian India, REED Palaeont. indica 17.

†*Productus* (*Striatifera*) *compressus*, REED 102 p. 12.

†*Productus* (*Waagenoconcha*) *abichi* p. 4, var. *serialis* p. 5, var. *consors* var. n. p. 6, var. *pseudotuberculata* var. n. p. 7, var. *densipustulata* var. n. p. 8, var. *pseudo-palliata* var. n., *vagans* sp. n. p. 9, *purdoni* p. 10, Permian India, REED Palaeont. indica 17.

Pustula senticosa sp. n. p. 47, *micracantha* sp. n. p. 49 Permo-Carboniferous W. Australia, HOSKING J. Roy. Soc. W. Australia 19.—*P. palmeri* sp. n. p. 391, *keytei* sp. n. p. 392, Carboniferous U.S.A., Girty J. Wash. Acad. Sci. 21.

†*Strophalosia* sp. figured, REED 103 p. 90.—*S. cf. cancrini*, CASPER 16 p. 67.—*S. fugax* sp. n. p. 16, *plicosa* p. 17 Permian India, REED Palaeont. indica 17.

†*Tornquistia* emend. p. 168, DUNBAR & CONDRA 29.

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†*Richtovenia lawrenciana*, REED 102 p. 18.

†*Scacchinella* ? sp., REED 102 p. 17.

†*Teguliferina* diagnosed p. 275, *armata* p. 277, DUNBAR & CONDRA 29.

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†*Keyserlingina* discussed p. 78, *caucasica* p. 79, 103, LICHAREW 77.

†*Lyttonia* discussed p. 55, 85, *richt-hofeni* p. 56, 86, form. *lopingensis* form. n. p. 57, 86, form. *nobilis* form. n. p. 69, 96, var. *nana* var. n. p. 73, 99, Permian Caucasus, LICHAREW Trans. Geol. Prosp. Serv. U.S.S.R. 215.—*L. conica* p. 8, *richthofeni* var. *nobilis* p. 12, *latisepta* p. 16, figured, PARONA 92.—*L. nobilis* p. 93, sp. p. 94, HUANG 60.—*L. nobilis* p. 103, REED 103.

†*Lyttonia* (*Leptodus*) *nobilis* p. 39, REED 102.

†*Oldhamina squamosa* var. *anshunensis*? HUANG 60 p. 92.

†*Poikilosakos* diagnosed p. 270, *petaloides* p. 272, DUNBAR & CONDR 29.

ISOGRAMMIDAE.

†*Isoграмма carinthiaca* sp. n. p. 8, Carboniferous Austria, AIGNER Mitt. naturw. Ver. Steiermark 68.—*I.* diagnosed p. 280, *millepunctata* p. 282, DUNBAR & CONDR 29.

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CAMAROTOECHIIDAE.

†*Camarotoechia orientalis, plena* p. 384, WILSON 135.—*C. eximia* figured, SCHUCHERT 113 p. 312.—*Rhynchonella* (*C.*) *acutirugata* figured, SCHMIDT 112 p. 28.—*R. (C.)* aff. *nucula*, aff. *andrewsi* and cf. *lacunosa* p. 86, FUCHS 44.—*C.* cf. *sappho* p. 211, NALIVKIN 84.—*C. allani* sp. n. Carboniferous Canada, ALLAN, WARREN & RUTHERFORD Trans. Roy. Soc. Can. 26 iv. p. 244.

†*Leiorhynchus* diagnosed, *rockymontanus* p. 285, DUNBAR & CONDR 29.

†*Pugnax pugnax*, cf. *sulcatus* variation p. 57, SIMPSON 118.—*P. pseudoutah* sp. n. p. 64, Permian China, HUANG Palaeont. sinica B 9 2.—*P. pugnax* described, HOSKING 59 p. 74.

†*Rhynchonella* (*Uncinulus*?) *theobaldi* p. 33, REED 102.

†*Rhynchopora* diagnosed, structure and affinities with *Centronellidae* discussed p. 295, *illinoisensis* p. 297, *carbonaria* p. 299, *magnicosta* p. 301, DUNBAR & CONDR 29.

†*Rhynchotetra mansuyi* sp. n. p. 36, Permian India, REED Palaeont. indica 17.

†*Rhynchotrema intermedia* sp. n. p. 400 Ordovician Canada, WILSON Trans. Roy. Soc. Can. 26 iv.

†*Stenoschisma humbletonensis* figured, SILVESTRI 117 p. 15.

†*Terebratuloidea* cf. *davidsoni* p. 66, *depressa* p. 67, HUANG 60.—*Rhynchonella* (*T.*) *crassirostris* var. *solitaria* var. n. p. 34 Permian India, REED Palaeont. indica 17.

†*Uncinunellina timorensis* p. 61, HUANG 60.

†*Wellerella* gen. n. type *W. tetrahedra* sp. n. p. 286, *osagensis* p. 288, var. *immatura* var. n. p. 290, *tetrahedra* sp. n. p. 291, *truncata*, sp. n. p. 292, *delicatula* p. 293, *dekalbensis* spp. n. Upper Carboniferous U.S.A., DUNBAR & CONDR Bull. geol. surv. Nebraska 5.

†*Wilsonia cuboides* described, HOSKING 59 p. 74.

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†*Capillirhynchia gallatinensis* sp. n. p. 881 Upper Jurassic N. America, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5.

†*Flabellirhynchia falconis* sp. n. p. 881, *concinna* sp. n. p. 882 Middle Jurassic N. America, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5.

†*Globirhynchia gnathophora, oblatopinguus* sp. n. p. 878, *schucherti* sp. n., *rhacta* sp. n. p. 879, Middle Jurassic N. America, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5.

†*Gnathorhynchia perplicata* sp. n. p. 874 Upper Jurassic U.S.A., CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5.

Hemithyris psittacea, var. *woodwardi, nigricans, lucida* p. 135, STIASNY 120.

†*Homoeorhynchia*? *moorei*, ? *webbi* p. 877, Middle Jurassic N. America, CRICKMAY 24.

†*Kallirhynchia phylarchus* sp. n., *valliculae* sp. n. p. 875, ? *orthidioides, myrina*, ? *whiteavesi* p. 876, Middle and Upper Jurassic N. America, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5.

†*Ptilorhynchia* gen. n. type *P. plumasensis* sp. n. Upper Jurassic U.S.A., CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5 p. 877.

†*Rhactorhynchia trigona* sp. n. p. 880, *?albertensis* p. 881 Middle Jurassic N. America, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5.

†*Rhynchonella pleurodon, contraria* p. 84, PFAB 94.—*R. daleidensis*, sp. cf. *daleidensis* p. 12 figured, WILSCHOWITZ 134.—*R. decurtata* var. *devota* p. 209, var. *divida* p. 212, *attilina* p. 210, *trinodosi* p. 211, MILOSAVLJEVIĆ 82.—*R. bosei* sp. n. Cretaceous Assam, GUPTA Quart. J. Geol. Min. Metal. Calcutta 21 p. 27.—*R. sp.* RAKOVEC 99 p. 81.—*R. aff. cuneiformis, pusilla* p. 49, *inversaformis, zitteli, briseis* p. 50, aff. *reynesi*, cfr. *zugmayeri, retusifrons* p. 51, *cartieri*, var. *rimata, curviceps* p. 52, *flabellum* p. 53, *sordellii, variabilis* p. 54, *plicatissima* p. 55, aff. *mariottii* mut., *retroplicata* p. 56, *farciens*, cfr. *wähneri* p. 57, RENZ 105.—*R. tetraedra* var. *curviceps* p. 222, *variabilis* p. 223, cf. *polyptycha* p. 224, TZANKOV & BONČEV 125.—*R. albertensis* sp. n. p. 8, *moorei* sp. n., *webbi* sp. n. p. 9, *whiteavesi* sp. n. p. 10 Jurassic Canada, WARREN Trans. Roy. Soc. Can. 26 iv.—*R. marinellii* sp. n. p. 84, *quemadensis* sp. n. p. 85, Devonian Argentine, FERUGLIO Giorn. geol. Bologna 5.—*R. curviceps* p. 49, sp. ind. cfr. *dalmasi* p. 50, *lucernaeformis* p. 54, *capillata* p. 55, DESIO 27.—“*R.*” *maridensis, obesa* p. 874, CRICKMAY 24.—*R. fischeri* p. 212, *orbigny, triplicosa* p. 213, *spathica* var. *royeriana* p. 214, figured, CORROY 23.—*R. irregularis, multiformis*, cf. *decipiens* p. 125, BONČEV 9.—*R. cf. crenifera* p. 61, BASSE 8.

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†*Rhynchonella (Hemithyris) vinassai* sp. n. p. 86 Miocene Italy, BONI Bol. soc. geol. ital. 52 1.

†*Rhynchonellid* n. sp. figured p. 277, LOEL & COREY 78.

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ATRYPIDAE.

†*Atrypa reticularis, aspera*, NALIVKIN 84 p. 211.—*A. aspera* p. 71, cf. *aspera, desquamata* p. 72, sp. group 3, *reticularis* p. 73 described or figured, HOSKING 59.—*A. sp., nuntia, waterlooensis* figured p. 72, FENTON & FENTON 35.

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†*Leptocoelia flabellites*, FERUGIO 37 p. 86.

SPIRIFERACEA.

SPIRIFERIDAE.

†*Acanthospirina aciculifera* figured showing colour banding, ROWLEY & WILLIAMS 109 p. 47.

†*Ambocoelia* diagnosed p. 343, *planoconvexa* p. 344, *expansa* sp. n. p. 348, *lobata* p. 349, Upper Carboniferous U.S.A., DUNBAR & CONDRA Bull. Geol. Surv. Nebraska 5.—*A. urii* figured, SCHMIDT 112 p. 29.

†*Cryptospirifer* discussed p. 43, *omeishanensis* sp. n. p. 44, *striatus, semiplicatus* spp. n. p. 46 Permian China, HUANG Palaeont. sinica B 9 2.

†*Delthyridae* discussed p. 23, MERLA 80.

†*Lockengia* gen. n. of Spiriferidae, type *L. holoensis* sp. n., *enteleteformis, anormalis, applicata* spp. n. nom. nud. Permian Mongolia, GRABAU Nat. Hist. Central Asia 4 1931 p. 478 (omitted from 1931 record).

†*Martinia glabra* p. 29, SCHMIDT 112.—*M. dispar*, REED 103 p. 99.—*M. elongata* var. *sinuata* var. n. p. 22, *semplicata* var. *radiata* var. n. p. 23, *elegans* var. *particeps* var. n. p. 24 Permian India, REED Palaeont. indica 17.—*M. cf. glabra* figured, RAKOVEC 99 p. 81.—*M. gigantea* p. 30, *trigona* sp. n., cfr. *polymorpha* p. 32, *gibbosa* sp. n., cfr. *polymorpha* and *lamellosa* p. 33, *glabra* p. 35 Permian Dolomites, MERLA Mem. Inst. Geol. Univ. Padova 9.—*M. triquetra* p. 48, cf. *glabra* p. 49, *squamularioides* sp. n. p. 50, cf. *orbicularis* p. 52 Permian China, HUANG Palaeont. sinica B 9 2.—*M. sp.* figured, HAYASAKA 55 p. 41.

†*Martiniidae* discussed, MERLA 80 p. 29.

†*Martiniopsis latouchi*, cf. *subpentagonalis* p. 99, REED 103.—*M. omeishanensis* sp. n. p. 53, Permian China, HUANG Palaeont. sinica B 9 2.

†*Mentzelia* sp. ind. p. 26, MERLA 80.

†*Neospirifer* diagnosed p. 326, *triplicatus* p. 328, var. *alatus* var. n. p. 332, var. *gibbosus* var. n. p. 333, *cameratus*

p. 334, *latus* sp. n. p. 336, *kansasensis* p. 337, *texanus* p. 338, *gorei* p. 341, Upper Carboniferous U.S.A., DUNBAR & CONDRÁ Bull. Geol. Surv. Nebraska 5.—*N. dunbari* nom. n. for *Spirifer triplicatus* Hall Carboniferous U.S.A., KING J. Paleont. Sharon Mass. 7 4 p. 441.—*Spirifer* (*N.*) *fasciger* p. 19, var. *nitiensis* p. 20, *warchensis* sp. n. p. 21, Permian India, REED Palaeont. indica 17.—*S.* (*N.*) *triplicatus*, cf. *costella* p. 532, REED 101.

†*Platyrachella* cf. *macbridei* p. 312, figured, SCHUCHERT 113.

†*Quadrifarius loculatus* var. *taunica* var. n. p. 85 Devonian Germany, FUCHS Jahrb. nassau. Ver. Naturk. 80.

†*Reticularia indica* p. 25, REED 102.—*R.* cfr. *lineata* p. 28, MERLA 80.

†*Spirifer verneuili* in Japan, YABE & NODA 139 p. 521.—*S.* diagnosed p. 317, *rockymontanus* p. 318, *opimus* p. 320, *matheri* nom. n. for *S. rockymontanus* Mather 1915, *occidentalis* p. 322, Upper Carboniferous U.S.A., DUNBAR & CONDRÁ Bull. Geol. Surv. Nebraska 5.—*S. primaevus*, *hercyniae* var. *primaeviformis* p. 12, *solitarius*, *hystericus*, sp. cf. *excavatus*, sp. cf. *carinatus* var. *crassica*, sp. cf. *denkmanni* p. 13, figured, cf. *folmanni*, *hystericus* p. 41, WILSCHOWITZ 134.—*S. elevatus* var. *inchoans* figured, VASCAUTANU 126 pl. vi.—*S. verneuili* p. 28, *strumianus* p. 29 figured, SCHMIDT 112.—*S. condor* var. 1 p. 529, var. 2 p. 531 described, REED 101.—*S. cameratus* figured, RAKOVEC 99 p. 80.—*S. novosibiricus* figured, sp. p. 211, NALIVKIN 84.—*S. trigonalis* recorded, METZ 81 p. 243.—*S.* cfr. *duplicata*, cfr. *supracarbonicus* p. 24, ? *impar* p. 26, MERLA 80.—*S. mahaensis* sp. n. p. 41, Permian China, HUANG Palaeont. sinica B 9 2.—*S.* sp. figured, HOSKING 59 p. 75.—*S.* sp. figured, HOSKING 58 p. 52.—*S. acutipliatus* sp. n. p. 38 Carboniferous Japan, HAYASAKA Mem. Fac. Sci. Taihoku Imp. Univ. Formosa 6 2.—*S.* n. sp. aff. *mercurii*, aff. *mackenzicus* p. 84 Devonian Germany, FUCHS Jahrb. nassau. Ver. Naturk. 80.—*S.* cf. *cameratus* figured, FIEBOLD 42 p. 26.—*S. cameratus* p. 15, cf. *cameratus* = *condor* p. 16 figured, FIEBOLD 40.—*S. orestes* evolution and ecology, FENTON 33 p. 223.—*S. albertensis* sp. n. p. 244, *jasperensis* sp. n. p. 245, *rutherfordi* sp. n. p. 247,

Carboniferous Canada, ALLAN, WARREN & RUTHERFORD Trans. Roy. Soc. Can. 26 iv.

†*Spirifer* (*Brachythyris*) *opimus*, *rockymontanus* p. 533, REED 101.

†*Spirifer* (*Spiriferella*) *vercherei*, REED 102 p. 22.

†Spiriferidae discussed, MERLA 80 p. 21.

†*Squamularia* diagnosed p. 311, ? *perplexa* serial sections p. 313, DUNBAR & CONDRÁ 29.—*S. asiatica* p. 97, *duplex* sp. n. p. 98, ? *indica* p. 99 Permo-Carboniferous Burma, REED Rec. Geol. Surv. Ind. 67 1.—*S. perplexa* described, REED 101 p. 534.—*S. inaequilateralis* p. 31, aff. *elegantula* p. 34, cf. *grandis* p. 36, *indica*, cf. *calori* p. 38, *asiatica* p. 40, figured, HUANG 60.—*S.* sp. figured, HAYASAKA 55 p. 40.

†*Syringothyris* aff. *northi* figured, SCHMIDT 112 p. 30.

SPIRIFERINIDAE.

†*Cyrtina* sp. cf. *exporrecta-heteroclyta*, WILSCHOWITZ 134 p. 14.

†*Hirsutina* gen. n. type *H. hirsuta* Alberti Trias Germany, KIRCHNER N. Jahrb. Geol. Paläont. 71 1 p. 106.

†*Punctospirifer* diagnosed p. 350, *kentuckyensis* serial sections p. 351, DUNBAR & CONDRÁ 29.

†*Spiriferellina octoplicata* figured, SCHMIDT 112 p. 30.—*Spiriferina* (*S.*) *shanensis* sp. n. Permo-Carboniferous Burma, REED Rec. Geol. Surv. Ind. 67 1 p. 95.

†*Spiriferina* genus discussed p. 6, *darwini* mut. *gracca* mut. n. p. 7, aff. *darwini*, *nausikae* sp. n. p. 10, *obtusata* p. 11, *rostrata* var. *epirotica* var. n. p. 12, *serinensis*, *pichleri* mut. p. 15, *sicula* var. *corfiotica* var. n. p. 16, var. *odyssei* var. n. p. 19, *alpina* var. *falloti* p. 21, var. *telemachi* nom. n. for *Spiriferina rostrata* Parona 1892 non Schlothheim, p. 23, *gryphoidea* p. 25 Lias Corfu, RENZ Abh. schweiz. paläont. Ges. 52.—*S.* cf. *cambodgiensis* p. 25, *multiplicata* var. *punjabensis* var. n. p. 26 Permian India, REED Palaeont. indica 17.—*S. ptychiphila* var. *angusta* p. 207, *menzeli* cf. var. *brevirostris* p. 209, sp. p. 211, MILOSAVLJEVIĆ 82.—*S. fragilis* p. 94, figured and serial sections, KIRCHNER 68.—*S. cristata* var. *octoplicata* p. 55, *multiplicata* p. 57, mut a mut. n. p. 59,

Permian China, HUANG Palaeont. sinica B 9 2.—*S. cristata* p. 52, *cristata* var. *decipiens* var. n. p. 53, *papilionata* sp. n. p. 54, Permo-Carboniferous W. Australia, HOSKING J. Roy. Soc. W. Australia 19.—*S. alpina* var. *julia* var. n. p. 48, cfr. *gryphoidea*, sp. ind. p. 49, DESIO Giorn. di Geol. Bologna 2.

†*Spiriferina* (*Reticulariina*) *conquisita* sp. n. Permo-Carboniferous Burma, REED Rec. Geol. Surv. Ind. 67 1 p. 97.

†Cf. *Tylothyrus laminosa*, SCHMIDT 112.

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MERISTELLIDAE.

†*Hyattidina* sp., REED 104 p. 206.

RHYNCHOSPIRINIDAE.

†*Hustedia* diagnosed p. 355, *mormoni* serial sections p. 357, DUNBAR & CONDRA 29.—*H. grandicosta* p. 32, REED 102.—*H. indica* p. 78, *remota* p. 79, HUANG 60.

†*Retzia* (*Hustedia*) *radialis* recorded, METZ 81 p. 243.

†*Retzia bouchardii* p. 85, FUCHS 44.—*R.* sp. ind., DESIO 27 p. 10.

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†*Athyris* sp., WILSCHOWITZ 134 p. 14, —*A. simulans* sp. n. p. 26, *xetra*, *timorensis* var. *complanata* var. n. p. 28, Permian India, REED Palaeont. indica 17.—*A.* discussed p. 51, *cadorica* p. 54, cfr. *crux* p. 55, *janiceps* p. 56, *papilio* p. 57, *aquilina* p. 59, *semilunaris* sp. n. p. 60, *peracuta*, *pusilla* p. 63, *bipartita* p. 64, *protea* var. *quadrilobata* p. 66, *irregularis* sp. n. p. 67, *protea* var. *recticardinis* var. n. p. 67, *protea* var. n. ind., cfr. *royssii* p. 68, cfr. *planosulcata* p. 69, *expansa* p. 70 Permian Dolomites, MERLA Mem. Inst. geol. univ. Padova 9.—*A. timorensis* p. 69, cf. *globulina*, *capitata* p. 72, *subtriangularis* p. 74, HUANG 60.—*A. pectinifera* p. 22, FIEBOLD 40.

†*Athyris* (*Cleiothyridina*) *pectinifera* p. 102, REED 103.—*A. (C.) pectinifera* p. 29, REED 102.—*C.* diagnosed, *orbicularis* p. 359, DUNBAR & CONDRA 29.—*C. orbicularis* described, REED 101 p. 534.

†*Comelicania* discussed p. 35, *vultur* p. 40, *ladina* p. 41, *megalotis* p. 42, sp. cfr. *megalotis* p. 43, *haueri* p. 44, *dalpiazi* sp. n. p. 45, *doryphora* sp. n. p. 47, *macroptera* sp. n. p. 48, *rostrata* sp. n. p. 49, *vespertilio* sp. n. p. 50 Permian Dolomites, MERLA Mem. Inst. Geol. Univ. Padova 9.

†*Composita* diagnosed p. 362, *subtilita* p. 363, *argentea* p. 367, *ovata* p. 370, *elongata* sp. n. p. 371, *trilobata* sp. n. p. 372, DUNBAR & CONDRA Bull. Geol. Surv. Nebraska 5.—*C. subtilita* p. 534, *trilobata*, *mexicana* p. 535 described, REED 101.—*C. athabaskensis* sp. n. p. 248, Carboniferous Canada, ALLAN, WARREN & RUTHERFORD Trans. Roy. Soc. Can. 26 iv.

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†*Spirigera* (*Plicigera*) *trigonella* figured and serial sections, KIRCHNER 68 p. 111.

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(b) BRYOZOA

BY

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†*Desmeplagioecia helvetica*, *imperfecta* spp. n. Miocene France, CANU & LECOINTRE Mém. Soc. géol. Fr. Paléont. 8 p. 154.

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†*Diaperoecia parvovicellata*, *clavata*, *caecotubae*, *andegavensis* spp. n. *D. flabellum*, Miocene France, CANU & LECOINTRE Mém. Soc. géol. Fr. Paléont. 8 pp. 156-159.

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†*Fistulipora ugamica*, *djebaglinica*, *tubulosa* spp. n. Carboniferous Turkistan, NIKIFOROVA Trans. geol. Ser. U.S.S.R. 207 pp. 4-6.

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†*Unitubigera rugosa* sp. n. *U. armorica*, Miocene France, CANU & LECOINTRE Mém. Soc. géol. Fr. 8 p. 155.

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†*Constellaria cambrensis* sp. n. Silurian Wales, LEWIS Ann. Mag. Nat. Hist. 12 1933 p. 593.

†*Dianulites* aff. *petropolitana*, OZAKI 39 p. 116.

†*Lioclema pushmatahensis* sp. n. Carboniferous Oklahoma, HARLTON J. Paleont. 7 p. 15.

†*Petalotrypa kossmati* sp. n. Carboniferous Turkestan, NIKIFOROVA Trans. Geol. Ser. U.S.S.R. 207 p. 6.

†*Polyteichus novaki*, *pusillus*, PRANTL 44 pp. 2, 13.

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†*Tabuliporella* gen. n. Batostomellidae, *T. nalikvini*, *badamica*, *badamica* var. *tuberculata* spp. & var. n. Carboniferous Turkestan, NIKIFOROVA Trans. Geol. Surv. U.S.S.R. 207 pp. 7-11.

†*Utrichotrypa prolifica* sp. n. Permian Vancouver Is., FRITZ Trans. Roy. Soc. Can. 26 IV 1932 p. 94.

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†*Acanthocladia ovachitensis* sp. n. Carboniferous Oklahoma, HARLTON J. Paleont. 7 p. 17.—*Acanthocladia* [sic] *multipora* sp. n. Permian Vancouver Is., FRITZ Trans. Roy. Soc. Can. 26 IV 1932 p. 104.

†*Clausotrypa spinosa* sp. n. Permian Vancouver Is., FRITZ Trans. Roy. Soc. Can. 26 IV 1932 p. 97.

†*Cystodictya elegans* sp. n. Carboniferous Oklahoma, HARLTON J. Paleont. 7 p. 18.—*C. dichotoma* sp. n. Carboniferous Turkestan, NIKIFOROVA Trans. Geol. Ser. U.S.S.R. 207 p. 40.

†*Dichotrypa tiberica*, ? *tiberica* var. *ramosa* sp. & var. n. *D. cf. flabellum*, Carboniferous Turkestan, NIKIFOROVA Trans. Geol. Ser. U.S.S.R. 207 pp. 42, 43.

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†*Glaucanome bohémica* sp. n. Devonian Bohemia, PRANTL Paleont. Bohem. 15 1932 p. 65.

†*Goniocladia intermedia* sp. n. Permian Vancouver Is., FRITZ Trans. Roy. Soc. Can. 26 IV p. 106.—*G. aff. stepanovi*, NIKIFOROVA 37 p. 41.—*G. tenuis*, *compacta*, *varians*, *pulchra*, *cycloporea*, *zalesskii*, *miloradovitschi*, *crassa* spp. n. Permian and Carboniferous Pechora Land, SHULGA-NESTERENKO Trans. Geol. Prosp. Serv. U.S.S.R. 259 pp. 49-53.

†*Hemitrypa composita* sp. n. Carboniferous Turkestan, NIKIFOROVA Trans. Geol. Ser. U.S.S.R. 207 p. 31.—*H. bohémica*, *tenella*, PRANTL 45 p. 55.

†*Hyphasmopora mukhini* sp. n. Carboniferous Turkestan, NIKIFOROVA Trans. Geol. Ser. U.S.S.R. 207 p. 39.

†*Isotrypa discreta* sp. n. *I. acris*, *bifrons*, *gracilis*, Devonian Bohemia, PRANTL Paleont. Bohem. 15 1932 pp. 57-59.

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†*Pinnatopora grandis* sp. n. Permian Vancouver Is., FRITZ Trans. Roy. Soc. Can. 26 IV 1932 p. 104.—*P. cf. flexicarinata*, NIKIFOROVA 37 p. 33.

†*Polypora schucherti* sp. n. Carboniferous Canada, BELL Mem. Geol. Surv. Can. 155 1929 p. 103.—*P. vancouverensis*,

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†*Platopora* sp., NIKIFOROVA 37 p. 37.—*P. bohémica bohémica*, *bohémica minor*, PRANTL 45 pp. 63, 64.

†*Ramipora variolata* var. *sinensis*, *cavernosa* sp. & var. n. *R. minuta* sp. n. Carboniferous and Permian Pechora Land, SHULGA-NESTERENKO Trans. Geol. Prosp. Serv. U.S.S.R. 259 pp. 55–57.

†*Ramiporalia* subgen. n. of *Ramipora* for *R. dichotoma* sp. n. Carboniferous Pechora Land, SHULGA-NESTERENKO Trans. Geol. Prosp. Serv. U.S.S.R. 259 p. 59.

†*Ramiporella* subgen. n. of *Ramipora* for *R. asimmetrica* sp. n. Carboniferous Pechora Land, SHULGA-NESTERENKO Trans. Geol. Prosp. Serv. U.S.S.R. 259 p. 57.

†*Ramiporina* subgen. n. of *Ramipora* for *R. arborescens* Stuck., SHULGA-NESTERENKO Trans. Geol. Prosp. Serv. U.S.S.R. 259 p. 58.

†*Reteporina formosa* sp. n. *R. petala*, *transiens*, Devonian Bohemia, PRANTL Paleont. Bohem. 15 1932 pp. 46, 47.

†*Rhabdomeson gracile* var. *sayramicum* var. n. Carboniferous Turkestan, NIKIFOROVA Trans. Geol. Ser. U.S.S.R. 207 p. 37.—*R. shanense* sp. n. Permo-carboniferous Shan States, REED Rec. Geol. Surv. Ind. 67 p. 113.—*R. kansanense* sp. n. Carboniferous Kansas, SAYRE Abstr. Theses Chicago 7 1931 p. 244.

†*Rhombopora porifera* sp. n. Permian Vancouver Is., FRITZ Trans. Roy. Soc. Can. 26 IV 1932 p. 96.—*R. nitidula*,

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†*Semicosciniun sacculus ornatus* var. n. Devonian Bohemia, PRANTL Paleont. Bohem. 15 1932 p. 54.

†*Septopora primitiva* sp. n. Carboniferous Canada, BELL Mem. Geol. Surv. Can. 155 1929 p. 102.—*S. cf. cestriensis*, *weberi*, aff. *biserialis-nervata*, NIKIFOROVA 37 pp. 34, 35.

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†*Synocladia* sp., NIKIFOROVA 37 p. 36.

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†*Alderina welleri* sp. n. *A. rustica*, Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 pp. 21, 20.

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†*Anornithopora fragilis* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 60.

†*Aplousina contumax* sp. n. *A. disjuncta*, Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 15.

†*Atactopridra* gen. n. for *Atactopora* Canu & Bassler 1929 preocc. Canu & Bassler Mém. Mus Hist. nat. Belg. 50 1931 p. 22. [Omitted from Z.R. LXIX.]

†*Beisselina intermedia*, *mortoni*, *lonsdalei* spp. n. *B. labiata*, Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 73.—*B. fourtauvi*, CIPOLLA 16 p. 4.—*B. grandissima* sp. n. Cretaceous Austria, KÜHN Geol. paläont. Abh. 17 1930 pp. 506, 508, pl. 1.

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†*Canupora prima* sp. n. Cretaceous Austria, KÜHN Geol. paläont. Abh. 17 1930 pp. 506, 508, pl. i.

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†*Craspedopora nova* sp. n. Eocene Belgium, DARTEVELLE Ann. Soc. Zool. Belge 63 p. 60.

†*Crassimarginatella intermedia* sp. n. *C. nematoporoides*, Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 pp. 27, 28.

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†*Diplothesis* gen. n. genotype *Micro-porella sparsiporosa* Ulrich & Bassler, CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 72.

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†*Exochella septentrionalis* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 79.

†*Floridina subscutata* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 34.

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†*Floridina trilobata* nom. n. for *Membranipora gothica* Meunier & Perrens, DARTEVELLE 17 p. 65.

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†*Hippothoa tenuicorda*, CANU & BASSLER 14 p. 71.

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†*Kelestoma simplex* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 55.

†*Kleidionella trabeculifera* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 86.

†*Lagynopora americana* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 45.

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†*Lunulites quadrilatera*, DARTEVELLE 17 p. 69.

†*Mastigophora rugosa* sp. n. Eocene Belgium, DARTEVELLE Ann. Soc. zool. Belge 63 p. 84.

†*Membranipora nellioides* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 13.—*M. canui* nom. n. for *M. tuberosa* Canu 1925, preocc., *M. harmeri*, DARTEVELLE 17 pp. 59, 58.

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†*Metrarabdotos vinassai* sp. n. Miocene Libya, PANZERA Boll. Soc. geol. ital. 51 1932 p. 295.

†*Micropora ogivalina, parva* spp. n. *M. cylindracea, pulchra*, Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 pp. 35, 36.

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†*Mollia lacessor, parvicella* spp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 pp. 37, 38.

†*Monoporella laticella* sp. n. *M. vincentownensis*, Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 39.

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†*Nannopora minimora* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 52.

†*Nellia pergensii* nom. n. for *Cellaria hians* Meunier & Pergens, DARTEVELLE 17 p. 76.

†*Ogivalina ramiformis* sp. n. Cretaceous Austria, KÜHN Geol. paläont. Abh. 17 1930 pp. 506, 508, pl. i.

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†*Perigastrella exserta*, CANU & BASSLER 14 p. 80.

†*Periporosella plebeia*, CANU & BASSLER 14 p. 25.

†*Plagiopora*, HARMER 24 p. 627.

†*Pliophloea elegans, ventricosa* spp. n. *P. sagera*, Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 pp. 49–51.

†*Polycephalophora birostrata* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 59.

Porella propinqua, acutirostris, proboscidea, skenei, plana, OSBURN 38 pp. 345–347.

†*Porella planulata*, PANZERA 40 p. 294.

Posterula sarsi, OSBURN 38 p. 323.

Psileschara, HARMER 24 p. 626.

†*Psilosecos* gen. n. Reteporidae genotype *Escharinella muralis* Gabb & Horn, CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 83.

Pyriporella catenularia, OSBURN 38 p. 309.

Retepora (Malleatia) rara forms *typica, septentrionaria, granulosa* [2 latter as *varr.* n. in explanation of plate II], CALVET Res. Camp. Sci. Monaco 83 1931 p. 100. [Omitted from Z.R. LXIX.]

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†*Rhiniopora tubulosa, parvirostrata* spp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 pp. 53, 54.

- Rhynchozoon*, HARMER 24 p. 626.
- Schizomopora canaliculata*, OSBURN 38 p. 347.
- Schizomavella auriculata*, OSBURN 38 p. 327.
- Schizotheca*, HARMER 24 p. 626.
- Scruparia clavata*, OSBURN 38 p. 307.
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- Sertella septentrionalis* nom. n. for *Retepora cellulosa forma cellulosa* Smitt 1868, HARMER Proc. Zool. Soc. London 1933 p. 620.
- †*Setosinella* gen. n. Setosellidae genotype *S. prolifica* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 41.
- Smittina reduplicata, novanglia* spp. n. Recent Maine, *S. trispinosa* var. *nitida*, *S. concinna*, *bella*, OSBURN Mt. Desert Is. Survey 5 pp. 333-338.
- †*Smittina curta*, DARTEVELLE 17 p. 80.
- †*Sparsiporina*, HARMER 24 p. 625.
- †*Stamenocella oculata*, CANU & BASSLER 14 p. 21.
- †*Steganoporella fragilis* sp. n. Eocene Belgium, DARTEVELLE Ann. Soc. Zool. Belge 63 p. 74.
- Stephanosella biaperta*, OSBURN 38 p. 327.
- †*Stichocados mucronatus* sp. n. *S. compositus*, Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 pp. 64, 62.

Stomachetosella sinuosa, producta, OSBURN 38 p. 324.

Tegella arctica, unicornis var. *armifera*, OSBURN 38 pp. 311, 312.

Tricellaria ternata, peachii, OSBURN 38 p. 315.

†*Tricephalophora acutirostris, in-crassata* spp. n. *T. prolifera*, Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 pp. 56-58.

Triphyllozoon munitum nom. n. for *Retepora monilifera* var. *munita* Hincks 1878, *T. apertum* nom. n. for *R. monilifera* var. *sinuata* MacGill. 1884, *T. cuspidatum* nom. n. for *R. monilifera* var. *umbonata* MacGill. 1884, HARMER Proc. Zool. Soc. London 1933 p. 623.

Umbonula arctica, OSBURN 38 p. 341.

†*Vincularia acutirostris* sp. n. Cretaceous U.S.A., CANU & BASSLER Bull. U.S. Nat. Mus. 165 p. 13.

†*Vittaticella enormis, grandis, speciosa, insignis, sacculata, praetenuis, rostrata, teres, hannaforði*, STACH 57 pp. 88-97.

Vittaticellinae, sub-fam. n. Catenicellidae, STACH Proc. Roy. Soc. Vict. 45 p. 87.

PHYLACTOLAEMATA.

None.

ENTOPROCTA.

None.

VIII. MOLLUSCA

BY

A. E. SALISBURY.

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Note.—The following arrangement is based on Pelseneer.

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Acanthochiton sagamicus sp. n. Japan, BERGENHAYN K. svenska Vetensk. Handl. 12 4 1933 p. 43 pl. i text-fig.

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Acanthopleura (Amphitomura) planispina sp. n. Japan, BERGENHAYN K. svenska Vetensk. Handl. 12 4 1933 p. 36 pls. i, iii text-fig.—*A. spiniger* (Sow.), *A. spinosa* (Brug.), Célèbes and Philippines, LÉLOUP 494.

Basiliochiton heathii, E. P. & E. M. CHACE 147.

Callochiton (Icoplax) septemcostatus sp. n. Japan, BERGENHAYN K. svenska Vetensk. Handl. 12 4 1933 p. 24 pl. i text-fig.

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Lucilina interplicata sp. n. Japan, BERGENHAYN K. svenska Vetensk. Handl. 12 4 1933 p. 29 pl. i text-fig.

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†*Bellerophon* Permian E. Greenland, H. FREEBOLD 297.

†*Bucaniella rectangularis* fig., *B. quemadensis* sp. n. Devonian Argentina, FERUGLIO Giornale di Geol. Bologna (2) 5 1930 p. 88 pl. xx (i) f. 9–11.

†*Cymbularia* Permian Dolomites figs., MERLA 535.

Emarginula solidula minor Monts. ea, mss. var. n., COEN Mem. Com. talassogr. Ital. 192 1933 p. 151.—*Emarginula fissura*, LÖNNBERG 507.

Erohaliotis subgen. n. type *Haliotis cyclobates* Peron, COTTON & GODFREY S. Aust. Nat. Adelaide 15 1 1933 p. 16.

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†*Goniospira helicaformis* "sp. n." [nom. nud.], SAYRE 780.

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GODFREY 206.—*Haliotis cyclobates* associated with Pinnæ, COTTON & GODFREY 206.—*Haliotis rufescens* experiments re effect of hunger, PATTERSON 651.—*Haliotis* Distribution in Japan, 868.

†*Helicotoma wanwanensis* sp. n. Wanwankow dolomite S. Manchuria, KOBAYASHI J. Fac. Sci. Univ. Tokyo Geol. 3 7 1933 p. 260 pl. v f. 3.

†*Hormotoma simplex* sp. n. Ordovician Ontario, A. E. WILSON Tr. R. S. Can. 3 26 iv 1932 p. 403 pl. vi.

†*Hypselentoma* gen. n. type *Pleurotomaria perhumerosa*, WELLER Rept. Investigations Illinois State Geol. Surv. 18 1929 p. 10.

†*Murchisonia matheri* "n. sp." [nom. nud.], SAYRE 780.—*M. rudis* fig., VASCANTANU 907.

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Notohaliotis subgen. n. type *Haliotis naevosa* Martyn subgen. including *H. roei* Gray, *H. conicopora* Peron, COTTON & GODFREY S. Aust. Nat. Adelaide 15 1 1933 p. 16.

†*Phanerotrema ornatum* "sp. n." [nom. nud.], SAYRE 780.

†*Pleurotomaria yabei* sp. n. Tertiary Japan, NOMURA & NÜNO Sci. Rep. Tôhoku Univ. 15 3 1932 p. 189 (21) pl. xii (ii) f. 6-9.—*P. ? borealis* sp. n. Jurassic Alberta, WARREN Tr. R. S. Can. 3 26 iv 1932 p. 33 pl. iv.—*P. ricordeana* Cotteau Aptien figs., HOUARD 382.—*P. bilineata, fisheri, kansasensis*, "n. spp." [nom. nud.], SAYRE 780.

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†*Ptychomphalina camerata* sp. n. Cretaceous Heidelberg, GRUBER Verh. naturw. Med. Ver. Heidelberg N.F. 17 4 1933 p. 271 pl. iv (xv) f. 11.

†*Ptychomphalus laudenslageri, lineata*, "n. spp." [nom. nud.], SAYRE 780.

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Scissurella prendrevillei sp. n. Chatham Islands, POWELL Rec. Auckland Inst. Mus. 1 4 1933 p. 193 pl. xxxiii f. 6.—*S. fairchildi* f. 3, 4; *bountyensis* f. 1, 2 spp. n. Bounty Islands, POWELL Rec.

Canterbury (N.Z.) Mus. 4 1 1933 p. 34 pl. vi.—*Scissurella*, COTTON & GODFREY 206.—*S. costata* var. *laevigata* Orb. 1823 figs.; *S. costata* Orb. figs., VAYSSIÈRE 909, 910.

†*Scissurella annulata* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 25 pl. i f. 14 a-c.

Scissurona remota, COTTON & GODFREY 206.

Schizotrochus australis Hedley, *S. gunteri* sp. n. S. Australia, COTTON & GODFREY S. Aust. Nat. Adelaide 15 1 1933 p. 23 pl. i f. 11.

Sinezona pauperata sp. n. Chatham Island, POWELL Rec. Auckland Inst. Mus. 1 4 1933 p. 193 pl. xxxiii f. 4, 5.

†*Sinuopea* sp. Upper Cambrian p. 870, SCHUCHERT 801.

†*Yvania* (Pleurotomariidae) *inclinata* p. 15 pls. 1 f. i, ii f. 9, iii f. 2-3b, 6; *pusilla* p. 17 pl. i f. 4 a-c; *supercrenata* p. 22 pls. i f. 2 a-3, iii f. 8; *knighti* p. 25 pls. i f. 5-8, iii f. 9; *salinensis* p. 27 pl. i f. 9-10c spp. n. Carboniferous N. America, J. M. WELLER Rept. Investigations Illinois State Geol. Surv. 18 1929.

†*Worthenia bicarinata* p. 278 p. iii (xiv) f. 13, 14; *reticulata* p. 280 pl. iv (xv) f. 9 spp. n. Cretaceous Heidelberg, GRUBER Verh. naturw. Med. Ver. Heidelberg N.F. 17 4 1933.—*W. inornata* p. 168 pl. ix f. 3, *radialis* p. 169 pl. ix f. 2, Permian Dolomites, MERLA Mem. Inst. geol. Univ. Padova 9 1931 [no. 2].

TROCHIDAE, STOMATELLIDAE, TURBINIDAE, DELPHINULIDAE, CYCLOSTREMATIDAE, COCCU- LIDAE.

†*Araeonema* gen. n. p. 40 type *A. virgatum* sp. n. p. 52, pl. ix f. 3 a-f, pl. xii f. 8 Missouri, J. B. KNIGHT J. Paleont. Sharon Mass. 7 1 1933.

†*Ampullotrochus granulatus bertii* (Foresti in Sched.) sp. n., SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 116 pl. vii (i) f. 27.

Anematina subgen. n. type *Strophostylus* (A.) *proutanus* Hall (= *Holopea proutana* Hall) Paleozoic, J. B. KNIGHT J. Paleont. Sharon Mass. 7 1 1933 p. 36.

†*Anomphalus umbilicatus* sp. n. Missouri, J. B. KNIGHT J. Paleont. Sharon Mass. 7 1 1933 p. 53, pl. ii f. 6 a-j, pl. xii f. 1.

†*Astraea morani* sp. n. Miocene California, LOEL & COREG Univ. Calif. Pub. Geol. 22 3 1932 p. 271 pl. lxiv f. 4-6b.

†*Basilissa ? tricineta* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 32 pl. iii f. 4 a-b.

Bolma turboides (Monts. mss.) sp. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. ii.

Brookula (Aequispirella) finlayi sp. n. Chatham Islands, POWELL Rec. Auckland Inst. Mus. 1 4 1933 p. 195 pl. xxxiii f. 1.

Calliostoma tornatum bullatum, maura, spp. n. *semisulcatum, nigrocoeruleum* (Monts. mss.) spp. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pls. i, ii.—*C. bonita* figs. 5, 6, *rema* figs. 3, 4 spp. n. Acapulco, STRONG, HANNA & HERTLEIN Proc. Calif. Acad. Sci. (4) 21 10 1933 p. 121 pl. v.—*C. mosselense* n. sp. [nom. nud.], KRIGE p. 60 442.—*C. palmeri* Dall. figs., STRONG, HANNA & HERTLEIN 860.

†*Calliostoma tullneri* sp. n. Miocene New Jersey, PILSBRY & HARBISON Proc. Acad. Nat. Sci. Philad. 85 1933 p. 116 pl. iv f. 17.

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†*Clanculopsis hoernesii savenensis* var. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 111 pl. vii (i) f. 25.

†*Collonia (Circulopsis) pusilla* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 27 pl. i f. 15 a-c.

†*Conominolia woodsi* sp. n. Tertiary N.Z., C. R. LAWS Trans. Pr. N.Z. Inst. 63 3 1933 p. 320 f. 31, 39.

Cyclostrema tomlini nom. nov. for *C. roseotincta* Turton, TURTON Mar. Shells Port Alfred Feb. 1933.

†*Delphinula (Pseudoninella) depressa* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 29, pl. ii f. 3 a-c.

†*Eucochlis* gen. n. type *E. perminuta* sp. n. Missouri, J. B. KNIGHT J. Paleont. Sharon Mass. 7 1 1933 pp. 40, 41.

†*Eucycloscala ultima* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 28 pl. ii f. 2 a-b.

†*Eumargarita brünnichi* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 32 pl. iii f. 11 a-c.

†*Gallensteinia* subgen. n. for *Trochus subglaber* Klppst., *carinthiaca* p. 162 f. 23 a-b, *altissima* p. 163 fig. 24 a-b, *trilineata* p. 164 f. 2e spp. n., GUGENBERGER SitzBer. Akad. Wiss. Wien I. 142 3-4 1933 pl. i.

Gibbula delicata (Monts. mss.) sp. n. *philberti* Récl. *solitaria* (Monts. mss.) var. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. i.—*Gibbula magus elata* Dan. & Sand. mss. var. n., *G. delicata* Monts. mss. sp. n., *G. ardens ornata*, *a. sulcosa*, *a. rudis* Monts. mss., *G. philberti solitaria*, *G. (Phorcus) richardi zigzag* Monts. mss., COEN Mem. Com. talassogr. Ital. 192 1933 p. 153-155.—*Gibbula sismondæ* (Issel) figs., BISACCHI 101.—*Gibbula*, WINCKWORTH 941.

†*Gibbula peloritana funicolosa* (Foresti in Sched.) sp. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 111 pl. vii (i) f. 26.

Gyriscus jeffreysianus figs., COEN 182.

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†*Holopea undulata* sp. n. Ordovician Ontario, A. E. WILSON Tr. R. S. Can. 3 26 iv 1932 p. 404 pl. vi.

Jujubinus exasperatus Penn. *istriana* var. n. *igneus* Monts. var. *coccinella* (Monts. mss.) var. n. *J. goniobasis* (Monts. mss.) sp. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. ii.

†*Leucorhynchia marginata* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 27 pl. ii f. 1 a-c.

†*Metriomphalus yonnines* fig. Hauterivien, HOUDARD 382.

Micrelenchus sanguineus morioria subsp. n. Chatham Islands, POWELL Rec. Auckland Inst. Mus. 1 4 1933 p. 194 pl. xxxvi f. 10, 11.

†*Microdoma ornatus* "n. sp." [nom. nud.], SAYBE 780.

†*Monodonta* (*Danilia*) *faxensis* p. 29 p. ii f. 4 a-c, *quadricordata* p. 30 pl. ii f. 5 a-c, *fenestrata* p. 31 pl. ii f. 8 a-c, *M. (Osilinus) carinata* p. 31 pl. ii f. 6 a-d 7 a-d spp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933.

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†*Straparollina holtedahli* sp. n. lower Ordovician Smøla Norway, T. STRAND Norsk. Geol. Tids. Oslo 11 3-4 1932 p. 358 pl. xi f. 1-4.

†*Strophostylus* (*Anematina*) *minutissimus* sp. n. Missouri, J. B. KNIGHT J. Paleont. Sharon Mass. 7 1 1933 p. 47 pl. viii f. 1 a-h, pl. xii f. 7.

†*Tegula* (*Chlorostoma*) *malibuensis* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 272 pl. lxiv f. 1 a-b.

†*Teinostoma glaberrimum* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 33 pl. ii f. 9 a-c.—*T. coburgi* fig., MEZNERICS 537.

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Trochocochlea mutabilis Phil. v. *acutidens* var. n. pl. i f. 2, *T. corcyrensis* (ex Stossich mss.) sp. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. i.—*T. turbinata* Born. *exerta*, *t. coarctata* Monts. mss., *t. lignaria* vars. n., *mutabilis* Phil. *altior*, *m. depressa*, *m. acutidens* vars. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 p. 152.

Trochus (*Isanda*) *hemprichi* Issel fig., *T. (Gibbula) hornungi* sp. n. Red Sea, BISACCHI Ann. Mus. Stor. nat. Genova 55 1932 p. 180 fig.—*T. (Tectus) achal-zicus*, *grelensis*, *gracilis*, *abichi*, spp. n. Eocene Transcaucasia, ISAEVA Trans. Geol. Prosp. Serv. U.S.S.R. 305 1933 pp. 6, 7 pl. i.—*T. niloticus* in commerce, F. W. MOORHOUSE 563.

†*Trochus hinckmanensis* sp. n. Jurassic California, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5 1932 p. 907 pl. xxvi f. 3.—*T. virgatus* fig., NARDINI 588.—*T. coarctatus*, PARONA 648.

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†*Aphanotylus ristici* sp. n. Servia, PAVLOVIC Bull. Soc. Sci. Skoplje 9 1931 p. 26 pl. xi f. 42-47.

†*Naticopsis* ? *minuta* n. sp. [nom. nud.], SAYRE 780.

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†*Neritina passyi*, HUHL & POLLAK 378.

†*Neritodonta brusinae rugosa* var. n. Servia, PAVLOVIC Bull. Soc. Sci. Skoplje 9 1931 p. 27 pl. xi f. 33-35.

†*Neritodonta ovulum* sp. n. Permian Dolomites, MERLA Mem. Inst. geol. Univ. Padova 9 1931 [no. 2] p. 182 pl. ix f. 6.

†*Proboscidia* subgen. n. of *Neritopsis* sole sp. *N. (P.) elongata* sp. n. Permian Dolomites, MERLA Mem. Inst. geol. Univ. Padova 9 1931 [no. 2] p. 184 pl. ix f. 11, 12.

Theodoxia fluviatilis, bourguignati,
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†*Trachydomia pustulosa* n. sp. [nom.
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Domingo, H. A. PILSBRY Proc. Acad.
Nat. Sci. Philad. 85 1933 p. 132 pl. vii
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Miraguana Is. Bahamas, W. S. CLENCH
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Helicina parva (Sow.) fig., JUTTING
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Lucidella manni Haiti, CLENCH &
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Helicina pompholyx pl. vii f. 11, 11a,
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Santo Domingo, H. A. PILSBRY Proc.
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Lucidella (Poeniella) conoidea sp. n.
Santo Domingo, H. A. PILSBRY Proc.
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Omphalorissa gen. n. [non descr.]
type *Georissa multilirata* Brazier, IRE-
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Aegopsis mosorensis sp. n. Jugoslavia,
KUŠČER Prirod. istrav. 18 1933 p. 140
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†*Alvania miocaenica, oceani* fig., A.
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†*Ampullaria speciosa* figs., NARDINI
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†*Arabia pallaryi* sp. n. Bartonian
Egypt, CUVILLIER Mem. Inst. Egypt 22
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Asolene iheringi sp. n. Rapids of
Butni, Rio Uruguay, Brazil, PILSBRY
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†*Bythinia tentaculata* fig. p. 45,
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V. p. 425 1931) Yucatan, BEQUAERT &
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Santo Domingo, CLENCH Proc. New
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Costellina gen. n. type *C. turrita* sp. n., KUŠČER Prirod. Istraž mat.-prir. Razred 18 1933 p. 64 pl. i f. 5 a, b.—*Costellina* "gen. n." Hydrobiidae for *C. turrita* fig., KUŠČER 468.

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†*Cyclostoma* (*Otopoma*) *cadurcensis* sp. n. Tertiary Spain p. 15 (239); *C. (O.) cadurcensis* sp. n. p. 80 (304) Cretaceous, FALLOT & BATALLER Mem. Acad. Barcelona (3) 20 8 1927 p. 15.

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†*Georgia guillainopsis*, *naticopsis* figs., NARDINI 588.

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†*Holopea reticulata* sp. n. Silurian Europe, VASČAUFANU Ann. Inst. Geol. Roman. Bucuresti 15 1931 p. 570 pl. xii f. 3-4, 907.

Hydrobia patrizii sp. n. Oasis of El Giof Cufra, BISACCHI Ann. Mus. Stor. nat. Genova 55 1932 p. 366 fig.—*H. torrei* sp. n. Cuba, PILSBRY & AGUAYO Nautilus 46 4 1933 p. 120 pl. vi f. 2.—*H. steini*, GRAZIADEI 334.—*H. jenkinsi* Smith, *baltica* Nils. figs., REICH p. 153 744.

†*Hydrobia* (?) *sudanensis* sp. n. Tertiary Sudan, COX Bull. Inst. égypt. 15 2 1933 p. 339 pl. iv f. 2.—*Hydrobia*, JESSEN 397.

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Iglica elongata sp. n. *absoloni parvula* subsp. n. Yugoslavia, KUŠČER Prirod Istraž mat. prir. Razred 18 1933 pp. 65-66 pl. i f. 7 a-b.—*Iglica elongata*, *absoloni parvula* subsp. n., KUŠČER 468.

†*Kosovia* gen. n. [Viviparidae] type *K. ornata* sp. n. p. 20 pl. x f. 25-32; *K. bouéi*, *compressa*, *matejici* spp. n. pp. 21-22 pl. xi Serbia, PAVLOVIC Bull. Soc. Sci. Skoplje 9 1931.

Lanistes ovum, GERMAIN 318.

†*Lanistes grabhami* sp. n. Tertiary Sudan, COX Bull. Inst. égypt. 15 2 1933 p. 335 pl. iii f. 4 a, b, 6.

Lanzaia vjetrenicae sp. n. Yugoslavia, KUŠČER Prirod. istrav. 18 1933 p. 139 pl. i f. 10.—*Lanzaia vjetrenicae* "sp. n.," KUŠČER 468.

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†*Littorinopsis faxensis* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 35 pl. iii f. 3 a-b.

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†*Paludestrina* (= *Hydrobia*) *nanna* sp. n. Pliocene Utah, R. V. CHAMBERLAIN & E. BERRY Nautilus 47 1 1933 p. 28 pl. v f. 13, 14.

Paladilhia radigueli, KENNARD 414.

Paludina fasciatoides "nov. spec."; *P. diluviana*, FRANZ 294.—*P. vivipara*, TUZET 900.

†*Paludina pura*, KRYSHTOFOVICH 448.

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†*Pila colchesteri* sp. n. Tertiary Sudan, COX Bull. Inst. égypt. 15 2 1933 p. 328 pl. iii f. 1, 2.

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†*Pomacea bibiana* sp. n. Ecuador, MARSHALL & BOWLES Proc. U.S. Nat. Mus. 82 5 1932 p. 4 pl. i f. 4, 5.

Pomatiasidae, Yucatan, BEQUAERT & CLENCH 86.

Pomatiopsis lapidaria (Say.), CLEAVE 161.

†*Potamolithoides* gen. n. type *P. bibianus* sp. n. Ecuador, MARSHALL & BOWLES Proc. U.S. Nat. Mus. 82 5 1932 p. 4 pl. i f. 1-3.

Poteria berendti abnormal example Yucatan, BEQUAERT & CLENCH 86.

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†*Pseudoceratodes* Sudan, *P. rex* sp. n. Tertiary Sudan, COX Bull. Inst. égypt. 15 2 1933 p. 334 pl. i, ii, iii f. 5.

Pseudocyclotus laeta (Möllendorff) fig., T. v. B. JUTTING 405.

Pupina vanheurni sp. n. Dutch North New Guinea, J. v. B. JUTTING Nova Guinea Leide 17 1 1933 p. 84 f. 14 (*P. minuta* Soós f. 15).

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Rissoia lucunae, monodontoides, scurra (Monts. mss.), spp. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. ii.

†*Rissoina vindobonensis* fig., MEYNERICO 537.

Scrobs crassiconus pl. xvi f. 4; *excelsus* pl. xvi f. 5, spp. n. New Zealand, POWELL Proc. Malac. Soc. 20 4 1933 p. 196.

Suavocallia gen. n. [non descr.] type *Callia splendens* Dohrn, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 57-59.

Subonoba delicatula f. 3, Auckland Ids.; *S. tenuistriata* f. 4, Wellington spp. n. New Zealand, POWELL Proc. Malac. Soc. 20 5 1933 p. 235.—*Subonoba inornata* p. 202 pl. xxxv f. 3; *morioria* p. 203 pl. xxxv f. 2 spp. n. Chatham Islands, POWELL Rec. Auckland Inst. Mus. 1 4 1933.

Surinamia subgen. n. of *Asolene* Orb. with genotype *Asolene* (*Surinamia*) *fairchildi* sp. n. Dutch Guiana, CLENCH Nautilus 47 2 1933 p. 71 pl. vii f. 1, 2.

Tylopoma, KREJCI-GRAF 441.

Valvata piscinalis oogenesis and spermatogenesis, ARTOM 42.—*V. piscinalis*, *cristata*, CAVALLINI 146.—*V. piscinalis*, DECKSBACH & DECKSBACH 243.—*V. biwaensis*, *annandalei*, *japonica* in Japanese Lakes figs., MIYADI & MORI 549.—*V. japonica*, *piscinalis* distribution in Japan, MIYADI & MORI 550.

†*Valvata radovanovići* sp. n. Servia, PAVLOVIC Bull. Soc. Sci. Skoplje 9 1931 p. 26 pl. xi f. 29, 30.—*V. goldfussiana*, *naticina*, *piscinalis*, figs., TESCH 885.—*V. piscinalis* fig. p. 45, WERVEKE 934.

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†*Vivipara vivipara*, *fasciata*, *diluviana* figs. p. 76, WERVEKE 934.

Viviparus contectoides goodrichi var. n. Florida, A. F. ARCHER Nautilus 47 1 1933 p. 18 pl. iii f. 1-3.—*V. lacustris albidus* var. nov. Sweden, SCHLESCH Arch. f. Moll. 65 3 134.—*V. malleatus viviparus contectoides*, C. H. BLAKE 107.—*V. viviparus*, *fasciatus* shell structure figs., KESSEL 416.—*Viviparus*, chemical contents, R. TUREK 897.

†*Viviparus murrayensis* sp. n. Cretaceous Alberta, L. S. RUSSELL Tr. R. S. Can. 3 26 iv 1932 p. 39 pl. i.—*V. glacialis*, *diluvians*, *viviparus*, *fasciatus*, figs., TESCH 885.

TRUNCATELLIDAE, ACICULIDAE, ASSIMINEIDAE.

Acicula lineata (Drap.), KEVAN 417.

†*Adeorbis crispatus* (Foresti in Schaed.) sp. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 113 pl. vii (i) f. 29.

Assimineae coëni (Monts. mss.) sp. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. ii.

†*Bulimorpha* [= *Subulites*] *meeki* nom. nov., *B. turnerensis* n. sp. [nom. nud.], SAYRE 780.

Homalogyra atomus, REMANE 734.

Skeneopsis planorbis spawn figs., O. LINKE 503.

Tornus subcarinatus, LEBOUR 489.

Truncatellidae, Yucatan, BEQUAERT & CLENCH 86.

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Anculosa carinata variation, BAILY, PEARL & WINSOR 60, 61.—*Anculosa carinata* oology figs., WINSOR 945.

Bittium simplex, WINCKWORTH 941.

†*Campanile brasiliense* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. e min. Brasil 8 1930 p. 245 pl. ix f. 3.

†*Cerithidea insulaemaris* sp. n. Miocene New Jersey, PILSBRY & HARBISON Proc. Acad. Nat. Sci. Philad. 85 1933 p. 115 pl. iv f. 20, 21.

†*Cerithiopsis* subgen. n. of *Cerithidea* with type *C. (C.) insulaemaris* [P. & H.], PILSBRY & HARBISON Proc. Acad. Nat. Sci. Philad. 85 1933 p. 115.

Cerithiidae, Yucatan, BEQUAERT & CLENCH 86.—Cerithiidae synonymy, MARI 522.—Cerithiidae of Amoy, YEN 952.

Cerithiopsis conica, *scalaris*, *stilifer* (Monts. mss.) spp. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. iii.—*Cerithiopsis tubercularis*, *barleei* life history figs., LEBOUR 490.

†*Cerithiopsis unisulcata* p. 48 pl. iv f. (3, 4) a-b, *trinodosa* p. 49 pl. iv f. 5 a-b, *faxensis* p. 50 pl. v f. (6, 7, 8) a-b, *brünnichi* p. 50 pl. iv f. (14, 15) a-b, *jenseni* p. 51 pl. iv f. 11 a-b, *selandica* p. 51 f. (9, 10) a-b, *tricingulata* p. 52 pl. v f. 11 a-b, *obliquecostulata* p. 52 pl. iv f. (12, 13) a-b spp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933.

Cerithium fortii sp. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. iii.—*Cerithium vulgatum*, TUZET 900.

†*Cerithium* (*Vulgocerithium*) *mefferti* sp. n. Eocene Transcaucasia, ISAËVA Trans. Geol. Prosp. Serv. U.S.S.R. 305 1933 p. 26 pl. iii f. 15, 16.—*Cerithium* figs., VOITEŢI 917.—*Cerithium* sp. n. fig. Tertiary Europe, KÜHNEL p. 88 454.

†*Eoptychia* gen. n. p. 112 genotype *Loxonema sulcatum* de Koninck pl. x f. 1-3; *E. caledoniensis* p. 114 pl. x f. 4, 5, 6 Fife; *E. ventricosa* p. 114 pl. x f. 7, 8; Staffs., Carboniferous, J. LONGSTAFF Quart. J. Geol. Soc. 89 2 1933.

Faxiidae fam. n. for *Faxis* gen. n. [q.v.], RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 42.

†*Faxis macrostoma* gen. et sp. n. (of Faxiidae fam. n.) Cretaceous Denmark, RAVN K. danske Vid. Selskr. Skr. (9) 5 2 1933 p. 43 pl. vi f. (9, 10) a-b 11.

†*Flemingia geyeri* sp. n., GUGENBERGER SitzBer. Akad. Wiss. Wien I. 142 3-4 1933 p. 160 pl. i f. 26.

Gemelania cumingi nom. nov. = *jamaicensis* C. B. Adams; *G. peilei* sp. n. Jamaica, J. D. DEAN Jour. Conch. London 19 1933 pp. 331-333 figs.

Goniobasis virginica variation, BAILY, PEARL & WINSOR 60, 61.—*Goniobasis virginica* oology figs., WINSOR 945.

†*Goniobasis sanctamariensis* sp. n. S. Mary River formation Alberta, RUSSELL Canad. Field Nat. 46 4 1932 p. 81 f. 4.—*Goniobasis* ? *multicarinata* sp. n. Cretaceous Alberta, L. S. RUSSELL Tr. R. S. Can. 3 26 iv 1932 p. 41 pl. i.

†*Katosira smithiana* sp. n. Carboniferous Kilbirnie, J. LONGSTAFF Quart. J. Geol. Soc. 89 2 1933 p. 105 pl. ix f. 6-8.

†*Knightia* gen. n. *Loxonematidae* p. 118 genotype, *K. irregularis* sp. n. p. 119 pl. xii f. 4-6 Carboniferous Kilbirnie, J. LONGSTAFF Quart. J. Geol. Soc. 89 2 1933.

†*Loxonema philippii* p. 291 pl. iv (xv) f. 6-8; *L. (Zygopleura) jugata* p. 293 pl. iv (xv) f. 13 spp. n. Cretaceous Heidelberg, GRUBER Verh. naturw. Med. Ver. Heidelberg N.F. 17 4 1933.—*L. attenuatum* Hall fig., FERUGLIO 280.

Melania C. Africa, L. GAMBETTA 309.—*M. tuberculata texturata* Bavay fig., T. v. B. JUTTING 405.—*M. tuberculata* in Gulf of Tunis, SEURAT 808.

†*Melania multorbis* sp. n. Cretaceous Alberta, L. S. RUSSELL Tr. R. S. Can. 3 26 iv 1932 p. 41 pl. i.—*M. strombiformis*, BURCK 139.

Melanoides flavidus in salinity 0.12-6.36, PRUTHI p. 106 709.

†*Melanoides tuberculatus* figs., NARDINI 588.

Melanopsis bedei sp. n. Marocco, PALLARY Bull. Soc. H. N. Alger 247 1933 p. 248.

†*Melanopsis petkovici* sp. n. Servia, PAVLOVIC Bull. Soc. Sci. Skopje 9 1931 p. 19 pl. x f. 19, 20.

†*Mathildia unicarinata* p. 43 pl. iv f. 4 a-b, *M. rosenkrantzi* p. 44 pl. iv f. 7 a-b spp. n. Cretaceous Denmark, RAVN K. danske Vid. Selskr. Skr. (9) 5 2 1933.

†*Microptychis pygmaea* p. 111 pl. xii f. 1-3a; *jacksoni* p. 111 pl. x f. 12; ix f. 8 spp. n. Carboniferous Great Britain, J. LONGSTAFF Quart. J. Geol. Soc. 89 2 1933.

†*Nerinea thompsonensis* sp. n. Jurassic California, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5 1932 p. 907 pl. xxvi f. 1, 2.—*N. alexandrea ornata* var. n. Jurassic Kuban, S. Russia, PÖELINCEV Trans. geol. Prosp. Serv. U.S.S.R. 115 1933 pp. 9, 38 pl. iii f. 2, 3.—*N. rutteni* sp. n. p. 113 pl. i f. 4, 5 Kimmeridge France, *N. favrina triplicata* var. n. p. 115 fig., *infravalanginium* France, T. RAVEN Trav. Lab. Géol. Lyon 20 17 1932.

†*Newtoniella angustisulcata* p. 46 pl. v f. (1, 2) a-b, *subglabra* p. 47 pl. v f. 5 a-b, *faxensis* p. 48 pl. iv f. (3, 9) a-b, *fissicosta* p. 48 pl. iv f. (6, 10) a-b, spp. n. Cretaceous Denmark, RAVN K. danske Selskr. Skr. (9) 5 2 1933.

Oncomelania, F. C. LI 498.

†*Planaxis* ? *blanckenhorni* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 42 pl. iv.—*P. bantamensis* Pliocene Java, OOSTINGH Mijningénieur 12 Dec. 1933 pp. 212-213 f. 1, 2.

†*Platyoncha* gen. n. p. 116, genotype *P. dunlopiana* "sp. n." [nom. nov.] for *Loxonema brevis* Dunlop 1915, non McCoy 1844 p. 116 pl. xi f. 12-15; *P. tenuilineata* sp. n. p. 117 pl. xi f. 9-11; *P. hindi* "nom. n." [sp. n.] = *Loxonema acutum* deKoninck, Wheelton Hind 1905 Carboniferous Great Britain, J. LONGSTAFF Quart. J. Geol. Soc. 89 2 1933.

Pleurocera acuta, CLEAVE 162.

Potamides palustris, KUPPER 457.

†*Potamides sespeensis* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 253 pl. xvi f. 16, 17.—*P. palustris* figs., NARDINI 588.

†*Ptygmatis intermedia turrata* pp. 15, 38 pl. i f. 9–10; *P. i. dilatata* pp. 16, 38 pls. i, f. 11, ii, f. 6 vars. n. Jurassic Kuban S. Russia, PÖELINCEV Trans. geol. Prosp. Serv. U.S.S.R. 115 1933.

Semisulcospira libertina, *libertina reiniana*, l. *latifusus*, *multigranosa*, *niponica*, n. *biwae nakasekoeae*, FUKUOKA 305.

†*Sheppardiconcha* gen. n. type *S. bibbiana* sp. n. Biblical prov. of Canar, Ecuador, MARSHALL & BOWLES Pr. U.S. Nat. Mus. 82 5 1932 p. 3 pl. i f. 6.

Socienna aureola sp. n. Bounty Islands, POWELL Rec. Canterbury (N.Z.) Mus. 4 1 1933 p. 38 pl. vi f. 5.

Telescopium fuscum, KUPPER 457.

Thiara asperata, TALAVERA & FAUSTINO 879.—TUBANGUI & PASCO 896.

†*Thiara vouamica* figs., NARDINI 588.

Triphora perversa life history figs., LEBOUR 490.

†*Triphora bantamensis* sp. n. Pliocene Java, OOSTINGH Mijningenieur 11 Nov. 1933 pp. 192–193.—*T. (Ogivia) faxensis* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 55 pl. v f. 14 a–b.

†*Triforis (Epitrium) cretacea* p. 53 pl. v f. (12, 13) a–b, *crassigranulata* p. 54 pl. vi f. (1, 2) a–b, *separabilis* p. 55 pl. v f. 17 a–b spp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933.

†*Tretospira costata* sp. n. Cretaceous Heidelberg, GRUBER Verh. naturw. Med. Ver. Heidelberg N.F. 17 4 1933 p. 301 pl. iii (xiv) f. 15, 16.

†*Trypanaxis ? faxensis* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 53 pl. v f. 18 a–b.

†*Undularia (Stereokion) hohensteini* p. 297, *U. (S.) h. brevis* p. 298, sp. et var. n. Cretaceous Heidelberg, GRUBER Verh. naturw. Med. Ver. Heidelberg N.F. 17 4 1933.

†*Vicarya verneuili yokoyamai* subsp. n. Miocene Japan, TAKEYAMA Jap. J. Geol. Geogr. Tokyo 10 3–4 1933 p. 134 pl. xiii f. 4.

†*Zygopleura roscobiensis* p. 99 pls. viii f. 13–15, xii f. 7; *robroystonensis* p. 100 pl. viii f. 1, 2, 5; *benniana* p. 102 pl. viii f. 9–12; *redensis* p. 104 pl. viii f. 8 spp. n. Carboniferous Great Britain, J. LONGSTAFF Quart. J. Geol. Soc. 89 2 1933.—*Z. rugifera* var. *cylindracea* p. 94 pl. vii f. 10, 11, 17; *r. subplanata* p. 94 pl. vii f. 6, 7; *r. tenuinodosa* p. 95 pl. vii f. 8; *r. rowlandsi* p. 95 pl. vii f. 5, 9; *brevis grossicostata* p. 99 pl. ix f. 10; *robroystonensis youngiana* p. 101 pl. viii f. 6, 7; *r. tenuicostata* p. 102 pls. viii f. 3, xii f. 8, 9 vars. n. Carboniferous Great Britain, J. LONGSTAFF Quart. J. Geol. Soc. 89 2 1933.

**STROMBIDAE, APORRHAIIDAE,
STRUTHIOLARIIDAE, TRICHO-
TROPIDIDAE, VERMETIDAE,
TURRITELLIDAE, CAECIDAE,
XENOPHORIDAE.**

Aporrhais pespelecani abnormal figs., *A. p. venetiana*, *idealis*, *crispa*, *bifida*, *furcifera*, *applicata*, *protracta*, *adunca*, *aculeus*, *bilabiata*, *gigantea*, vars. n. *scalaris* monst. n., COEN Ann. Mus. Stor. nat. Genova 55 1931 [1932] pp. 142–145 figs.—*A. pes-pelicanus* eggs and larvae figs., LEBOUR 491.—*A. occidentalis mainensis* Johnson figs., PROCTER 705.

†*Chenopus (Quadrinervus) icaunensis* fig. Portlandian, HOUDARD 382.

Coecum, LEBOUR 489.

†*Dicroloma (Perisoptera) Robinaldina* Orb. fig., HOUDARD 382.

†*Mathilda bantamensis* Pliocene Java, OOSTINGH Mijningenieur Bandoeng 11 Nov. 1933 pp. 192–193.—*M. granosa bicingulata* var. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 108 pl. vii (i) f. 23.

†*Mathildia libyca* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 31 pl. viii.

†*Pereiraea africana* sp. n. Tertiary Loanda W. Africa, DOUVILLÉ Bol. Mus. Lab. Min. Geol. Univ. Lisbon 1 2 1933 p. 103 fig.

Pterocera violacea fig., J. K. ALLAN 18.—*P. lambis, rugosa*, as food (acts as mild narcotic), DERANIYAGALA 237.

†*Rostellaria mokattamensis* pl. vi, *cairensis* pl. v spp. n. Lutetian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 47.—*R. dentata loandensis* race nov. Tertiary Loanda W. Africa, DOUVILLE Bol. Inst. Lab. min. geol. Univ. Lisboa 1 2 1933 p. 102 pl. vii f. 2, 3.—*R. japonica* sp. n. Cretaceous Japan, NAGAO J. Fac. Sci. Hokkaido Imp. Univ. Japan (4) 2 1 1932 p. 44 pl. vii f. 1-3, 5, 6.

Strombus latissimus fig., J. K. ALLAN 18.—*S. bubonius* L. S. BERG 88.

†*Strombus pugilis* L. fig., TRECHMANN 894.

†*Struthiolaria tasmani* sp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933 p. 340 f. 30.

†*Terebellum dautzenbergi* sp. n. Lutetian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 46 pl. vi.

†*Tessarolax acutimarginatus* sp. n. Cretaceous Japan, NAGAO J. Fac. Sci. Hokkaido Imp. Univ. 4 2 1 1932 p. 43 pl. vi f. 10, 15.

Turritella communis Risso v. *extensa* (Monts. mss.) var. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933.—*T. communis* eggs and larvae figs., LEBOUR 491.

†*Turritella ineziana, ocoyana, temblorensis, tritschi* pl. iii, C. St. J. BREMNER 129.—*T. ineziana altacorona* p. 256 pl. lvii; *i. bicarina* p. 257 pls. lviii, lix; *i. santana* p. 259 pl. lix vars. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932.—*T. totium-sanctorum, antigona, arethusa, brunnhilda* spp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. e min. Brasil 8 1930 pp. 239-243 pl. xi.—*T. goniostoma* Los Angeles, SOFER & GRANT 828.—*T. saffordi, levicuneus, alabamiensis, abrupta* [?], *bellifera, mortoni, nasuta houstonia, nasuta* figs., F. B. PLUMMER 685.—*T. ola, kincaidensis, turnei* spp. n. Eocene Texas, F. B. PLUMMER Bull. Univ. Texas 3232 July 1933 pp. 815-816 pl. x.

Turritellidae of Amoy, YEN 952.

Vermetidae of Amoy, YEN 952.

Xenophora robusta Verrill figs., STRONG, HANNA & HERTLEIN 860.

†*Xenophora cleopatrae* sp. n. Bartonien Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 35 pl. vi.—*X. hawleyi* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 269 pl. lxiii f. 12.

†*Xenophorus trangahinsis* sp. n. Cretaceous Madagascar, E. BASSE Monog. Paléont. Cretace Mad. 1931 p. 54 pl. ix f. 17, 18.

HIPPONYCIDAE, CALYPTRAEIDAE, CAPULIDAE, VANIKORIDAE, LAMELLARIIDAE, NATICIDAE.

Amauropsis islandica, J. A. GRIEG 337.

†*Ampullina meshetica, georgiana*, spp. n. Eocene Transcaucasia, ISAEVA Trans. Geol. Prosp. Serv. U.S.S.R. 305 1933 p. 19 pls. i, ii.—*A. masria* sp. n. Lutetian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 38 pl. iv.

†*Calyptraea costellata panzana* var. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 268 pl. lxiii f. 10.

Calyptraeidae [Calyptraeidae,] of Amoy, YEN 952.

†*Clisospira niuhshintaiensis* sp. n. Wanwankow dolomites S. Manchuria, KOBAYASHI J. Fac. Sci. Univ. Tokyo Geol. 3 7 1933 p. 262 pl. iv f. 6.

Crepidula fornicata L., DALGLIESH 219.—*Crepidula fornicata*, J. H. ORTON 629.—*C. walski, unguiformis*, I. TAKI 877.

†*Crepidula diminutiva* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 267 pl. lxiii f. 13-15b.

†*Hipponyx cairensis, littlei, balli, menchikoffi* spp. n. Eocene Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 pp. 36-38 pl. iv.

Natica sancti-vincentii sp. n. W. coast of St. Vincent, British West Indies, S. T. BROOKS An. Carnegie Mus. Pittsburgh 21 4 1933 p. 413 fig.—*Natica catena*, PRÉRON 668.

†*Natica parakybensis* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. e min. Brasil 8 1930 p. 235 pl. ix f. 1.—*N. parisiensis*, HOHL & POLLAK 378.

†*Naticella spitzi semicostata* sp. et var. n. Cretaceous Heidelberg, GRUBER Verh. naturw. Med. Ver. Heidelberg N.F. 17 4 1933 pp. 285–286 pl. iv (xv) f. 1 a–b, 2; f. 3 a–b.

Naticidae, POWELL 699.—Naticidae of Amoy, YEN 952.

†*Polinices (Polinella) fryei* sp. n. Tertiary N.Z., C. R. LAWS Tr. Pr. N.Z. Inst. 63 3 1933 p. 321 f. 30.

†*Sigaretus sumatrensis* sp. n. Neogene Sumatra, HAANSTRA & SPIKER Pr. Acad. Sci. Amsterdam 35 10 1932 p. 1322 figs. 24, 25.

†*Tylostoma ampullariaeformis*, RAVN 722.

†*Uberella acerva* sp. n. Tertiary N.Z., C. R. LAWS Tr. Pr. N.Z. Inst. 63 3 1933 p. 321 f. 32.

Velutina, LEBOUR 489.

CYMATIIDAE, CASSIDIDAE, TONNIDAE, CYPRAEIDAE, ARCHITECTONICIDAE.

†*Aeneator imperator* sp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933 p. 341 f. 3.

Amphiperas ovum, KÜHNELT 448a.

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Basilitrona isabella, SCHILDER 786.

Cabestana waterhousei segregata subsp. n. (*Cymatium waterhousei* (Ad. & Ang.) Powell Tr. N.Z. Inst. 57 p. 560), POWELL Tr. Pr. N.Z. Inst. 63 2 1933 p. 156 pl. xxiii f. 3.—*Cabestana bolteniana* (A. & Ad.), *labiosa* (Wood) figs., POWELL 699.

†*Cassidaria erbi* sp. n. Neogene Sumatra, HAANSTRA & SPIKER Pr. Acad. Sci. Amsterdam 35 10 1932 fig.—*C. pharaonica* sp. n. Lutetian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 50 pl. viii.

†*Cassidea pyramidata* p. 48 pl. viii, *menkarae* p. 49 pl. vi spp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933.

Cassididae, MARI 524.—Cassididae of Amoy, YEN 952.

Charonia 'S Rijks Mus., CH. BAYER 81.

Cleotrivra pilula Kiener, SCHILDER 786.

Cymatiidae, POWELL 699.

Cymatium 'S Rijks Mus., CH. BAYER 81.

†*Cymatium jobbernsi* sp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933 p. 341 f. 1.

Cypraea pirum L. *physoides* var. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. iii.—*Cypraea mappa* fig., J. K. ALLAN 18.—*Cypraea* Notes and Conchometry, SCHILDER 789.

†*Cypraea parahybensis* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. min. Brasil 8 1930 p. 203 pl. x f. 4.

†Cypracaea Foss. Catal., SCHILDER 784.

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†Cypraeidae, RAVN 722.

Distortrix 'S Rijks Mus., CH. BAYER 81.

Doliidae, MARI 524.—Doliidae [= Tonnidae] of Amoy, YEN 952.

†*Dolium paucicostatum* sp. n. Tertiary Loanda W. Africa, DOUVILLÉ Bol. Mus. Lab. Min. Geol. Univ. Lisbon 1 2 1933 p. 100 pl. vi f. 1, 2.

†*Eocypraea (Eocypraea) boadicea wemmelensis*, E. (E.) *globularis belgica* vars. n. Pliocene Belgium, SCHILDER Bull. Mus. Hist. nat. Belg. 9 9 1933 pp. 25–26 f. 7, 8.

Erato pernana praecedens Miocene Italy; *incrassata turonica*, i. *andicavica* Miocene France; *spiralis cerulli*, *elongata etrusca* Eocene Italy; *voluta panormitana* Pleistocene Sicily, vars. n., SCHILDER Proc. Malac. Soc. 20 5 1933 pp. 249, 250, 253 figs.—*Erato voluta* figs., LEBOUR 488.

†*Erato medius* sp. n. Eocene Transcaucasia, ISAEVA Trans. Geol. Prosp. Serv. U.S.S.R. 305 1933 p. 34 pl. iii f. 17, 18.—*E. (Eratopsis) pernana scaldisia* f. 1, *E. (Erato) cypraeola britannica* vars. n. Pliocene Belgium, SCHILDER Bull. Mus. Hist. nat. Belg. 9 9 1933 pp. 1, 5 f. 1, 7.

†*Eratotrivia bruxellensis parisiensis* var. n. Eocene N. France, SCHILDER Proc. Malac. Soc. 20 5 1933 pp. 247, 253 figs.

Erosaria helvola hawaiiensis, SCHILDER 786.

Erronea (Blasicrura) kieneri depries-teri subsp. n. Dutch Indies, SCHILDER Jour. Conch. 19 11.—*E. caurica* chemical contents, R. TUREK 897.

†*Eudolium stephaniophorum laevituberculata* var. n. Italy, LIPPARINI Bol. Soc. geol. ital. 52 1 1933 p. 1 pl. i f. 1 a-b.

†*Galeodea (Cassidaria) bertii* (Foresti in Sched.) sp. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 90 pl. vii (i) f. 14.

Hespererato maugeriae martinicensis var. nov. W. Indies; *marginata galapagensis* var. n. Galapagos, SCHILDER Proc. Malac. Soc. 20 5 1933 pp. 249, 250 figs.

†*Hespererato rhenana* Oligocene Germany; *coccinii* Pliocene Italy spp. n., SCHILDER Proc. Malac. Soc. 20 5 1933 pp. 248, 249, 253 figs.

Hypermastus bountyensis sp. n. Bounty Islands N.Z., POWELL Proc. Malac. Soc. 20 5 1933 p. 235 pl. xx f. 5.

Legrandia aucklandica sp. n. Auckland Ids., N.Z., POWELL Proc. Malac. Soc. 20 5 1933 p. 233 f. 1.

Lyncina carneola arenosa, sulcidentata, SCHILDER 786.

Mauritia maculifera, scurra, SCHILDER 786.

Morio echinophora L. *intermedia, polycingulata, bivaricosa* vars. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. iii.

†*Neosimnia semen belgica, leathesi scaldisia* (Amphiperatidae) vars. n. Pliocene Belgium, SCHILDER Bull. Mus. Hist. nat. Belg. 9 9 1933 pp. 2, 15, 2, 17, figs. 5, 6.

Nuclearia honoluluensis, SCHILDER 786.

Ovulidae of Amoy, YEN 952.

Palmadusta waikikiensis sp. n. Hawaii, SCHILDER Occ. Pap. Bishop Mus. Honolulu 10 3 1933 p. 19 f. 3.—*Palmadusta unifasciata*, SCHILDER 786.

†*Pelagiella kinomotoensis* sp. n. Upper Cambrian Liaotung Asia, KOBAYASHI Jap. J. Geol. Geog. Tokyo 11 1-2 1933 p. 96 pl. ix f. 17-18.

†*Phalium yabei* sp. n. Neogene Japan, NOMURA & HATAI Jap. J. Geol. Geog. Tokyo 11 1-2 1933 p. 52 pl. viii f. 2-6, 8, 8a.—*P. yokoyamai* nom. n. for *Galeodea (Sconsia) japonica* Yokoyama, Neogene Japan, NOMURA & HATAI Jap. J. Geol. Geog. Tokyo 11 1-2 1933 p. 50 pl. viii f. 1, 1a, 3, 7.

†*Pirula (Ficulopsis) guitoni* sp. n. Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3-4 1933 p. 75 (163) pl. x f. 3, 4 [pl. x absent.]

Proterato sulcifera capensis S. Africa; *s. smithi*, Mauritius, vars. n. *tomlini* Japan; *pygmaea* China spp. n., SCHILDER Proc. Malac. Soc. 20 5 1933 pp. 248-253 figs.

†*Proterato tatei*, Mioc. Japan; *awamouna* Mioc. N.Z. spp. n., SCHILDER Proc. Malac. Soc. 20 5 1933 pp. 248, 253 figs.

†*Pseudogaleodea* gen. n. type *P. tricarinata* sp. n. "near *Galeodea* Link. (*Morio* Montf., *Cassidaria* Lam.)" Cretaceous Japan, NAGAO J. Fac. Sci. Hokkaido Imp. Univ. Japan (4) 2 1 1932 p. 46 pl. viii f. 1-7.

Pustularia tessellata, SCHILDER 786.

†*Ranella faxensis* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 59 pl. vi f. 6 a-b.

Ravitronea caputanguis, SCHILDER 786.

Solariidae of Amoy, YEN 952.

†*Solarium plicatum aegyptiaca* var. n. p. 29 pl. vi, *boussaci* sp. n. p. 30 pl. viii Eocene Egypt, CUVILLIER Mem. Inst. Egypt 22 1933.—†*Solarium nitens* Noethl., var. *granulata* var. n. figs. 19, 20; *S. palembangensis* sp. n. f. 21-23 Neogene Sumatra, HAANSTRA & SPIKER Pr. Acad. Sci. Amsterdam 35 10 1932 p. 1321.—*S. faxense* p. 34 pl. iii f. 1 a-c, 2 a-c; *poulseini* p. 35 pl. iii f. 5 a-c spp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933.

Staphylaea semiplota, SCHILDER 786.

Talostolida rashleighana, SCHILDER 786.

Talparia talpa, SCHILDER 786.

Tonna (= *Dolium*), WINCKWORTH & TOMLIN 944.

†*Torinia obtusa savenensis* (Foresti in Sched.) sp. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 102 pl. vii (i) f. 12.

†*Triton* (*Lampusia*) *triviricosum* sp. n. Tertiary W. Africa, Loanda, DOUVILLE Bol. Mus. Lab. Min. Geol. Univ. Lisbon 1 2 1933 p. 74 pl. iv f. 23, 24.—*T. apenninum bononiensis* var. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 69 pl. vii (i) f. 3.—*T. sauryi* sp. n. Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3-4 1933 p. 74 (162) pl. x f. 1, 1a [pl. x absent].

Tritonidae of Amoy, YEN 952.

†*Tritonium* (*Sassia*) *faxense* nom. nov. for *T. fenestratum* Ravn 1902, Ravn K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 58 pl. vi f. 16 a-b, pl. vi f. 7 a-b.

Trivia arctica, monacha figs., LEBOUR 487.—*T. monacha, arctica*, WINCKWORTH 941.

†*Trivia coccinelloides parvula* var. n. Pliocene Belgium, SCHILDER Bull. Mus. Hist. nat. Belg. 9 9 1933 pp. 2, 8.—*T. mediterranea frigida* "nov.," SCHILDER p. 109 784.

Trivirostra hordacea, edgari, pellucida, exigua, SCHILDER 786.

Zeadmete subantarctica sp. n. Snares Islands N.Z. 50 fms., POWELL Proc. Malac. Soc. 20 5 1933 p. 236 pl. xx f. 7.

PTENOGLOSSA.

IANTHINIDAE, EPITONIIDAE.

†*Aclisina breva, parallela*, "n. spp." [nom. nud.], SAYRE 780.

†*Acrilla elegans* Ravn, 722.

†*Clathroscala* (*Undiscala*) *similis* sp. n. Eocene Transcaucasia, ISAEVA Trans. Geol. Prosp. Serv. U.S.S.R. 305 1933 p. 51 pl. iv f. 25.

†*Coniscala faxensis* sp. n. Cretaceous Denmark, Ravn K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 38 pl. iii f. 7.

†*Gyroscala* (*Circuloscala*) *elegans* sp. n. Eocene Transcaucasia, ISAEVA Trans. Geol. Prosp. Serv. U.S.S.R. 305 1933 p. 48 pl. iv f. 23, 24.

†*Hyaloscala muricata* sp. n. Tertiary N.Z., C. R. LAWS Tr. Proc. N.Z. Inst. 63 3 1933 p. 322 f. 19, 36.

†*Orthonema liratum* "sp. n." [nom. nud.], SAYRE 780.

†*Pliscala debouryi* (Foresti in Schaed.) sp. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 93 pl. vii (i) f. 15.

†*Punctiscala* (*Scalaria*) *forestii* v. *bertii* (de Boury in Schaed.) var. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 93 pl. vii (i) f. 16.

Scala pretiosa fig., J. K. ALLAN 18.

†*Scala* (*Spiriscala*) *frondicula* fig., MEZNERICS 537.

Scalaria clathrus, LÖNNBERG 507.—*S. communis* L. *coronata* var. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. ii.—*Scalaria kowiensis* nom. nov. for *S. producta* Turton, TURTON Mar. Shells Port Alfred Feb. 1933.

†*Scalaria* (*Cirsostrema*) *loandensis* sp. n. Tertiary Loanda, W. Africa, DOUVILLE Bol. Mus. Lab. Min. Geol. Univ. Lisbon 1 2 1933 p. 106 pl. vi f. 13.—*S. libyca* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 31 pl. v.

Scalariidae [= Epitoniidae] of Amoy, YEN 952.

†*Spiniscala vinassai* "n. f." [sp. n.] Miocene Libia, N. Africa, PANZERA Bol. Soc. geol. ital. 51 2 1932 p. 292 pl. ix f. 8.

†*Subuliscala zavattarii* "n. f." [sp. n.] Miocene Libia, N. Africa, PANZERA Bol. Soc. geol. ital. 51 2 1932 p. 293 pl. ix f. 7.

Tuba arabica sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 34 pl. vii.

GYMNOGLOSSA.

PYRAMIDELLIDAE, STROMBIFORMIDAE.

†*Aclis* (*Graphis*) *danica* sp. n. Cretaceous Denmark, Ravn K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 38 pl. iii f. 6 a-b.

†*Anisocycla nitidissima subconoidea* (Foresti in sched.) sp. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 98 pl. vii (i) f. 19.

Chrysallida decussata, LEBOUR 489.

Eulima rogerae, murrayae, georgiiregis, edwardsi, triggi, planicincta, gradata, spp. n. S. Australia, COTTON & GODFREY S. Aust. Nat. Adelaide 14 1 1932 pp. 35-37 pl. i f. 12-17, 24.

†*Eulima otaiensis* sp. n. Tertiary N.Z., C. R. LAWS Tr. Proc. N.Z. Inst. 63 3 1933 p. 323 f. 25.—*E. (Polygyreulima) danica* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selskr. Skr. (9) 5 2 1933 p. 41 pl. iv f. 1 a-b, 2 a-b.

Eulimella plunketti sp. n. S. Australia, COTTON & GODFREY S. Aust. Nat. Adelaide 14 1 1932 p. 41 pl. i f. 24.—*E. curtata, flagellum* (Monts. mss.) spp. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. iv.—*E. nitidissima*, REMANE 734.

†*Eulimella turricompactilis pliocenica* var. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 98 pl. vii (i) f. 18.

†*Fusispira subfusiformis germana* var. n. Ordovician Ontario, A. E. WILSON Tr. R. S. Can. 3 26 iv 1932 p. 404 pl. vi.

†*Loxonema tortile* sp. n. Permian Dolomites, MERLA Mem. Inst. geol. Univ. Padova 9 1931 [No. 2] p. 196 pl. ix f. 23.

Melanella bermudezi sp. n. Cuba, PILSBRY & AGUAYO Nautilus 46 4 1933 p. 117 pl. vi f. 3.

†*Melanella retrocita* sp. n. Miocene New Jersey, PILSBRY & HARBISON Proc. Acad. Nat. Sci. Philad. 85 1933 p. 116 pl. iv f. 15.

Obeliscidae, COTTON & GODFREY 203.

Odostomia litoris sp. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. iv.—*Odostomia (Miralda) havenensis* sp. n. Cuba, PILSBRY & AGUAYO Nautilus 46 4 1933 p. 118 pl. vi f. 4.—*O. taylorae* sp. n. S. Australia, COTTON & GODFREY S. Aust. Nat. Adelaide 14 1 1932 p. 27 pl. i f. 9.—*O. tomlini* for *O. obtusa* Turton, *O. becki* for *O. obeliscus* Turton **nomm. nov.**, TURTON Mar. Shells Port Alfred Feb. 1933.

†*Odostomia selandica* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 40 pl. iii f. 13 a-b.—*O. felsinea* (Foresti in Schaed.) [sp. n. ?] Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 97.

†*Omphalopterycha koenigi* sp. n. Cretaceous Heidelberg, GRUBER Verh. naturw. Med. Ver. Heidelberg N.F. 17 4 1933 p. 299 pl. iv (xv) f. 5.

Oscilla tasmanica (T.-W.) 1876 = *O. ligata* Ad. 1877, COTTON & GODFREY 203.

†*Pyramidella scalaris* (Foresti in sched.) sp. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 96 pl. vii (i) f. 17.

Pyramidellidae of Amoy, YEN 952.

Pyrgulina denticulus, intermixta, alabastrum, coëni, vic-striata, canaliculata, ordila, pyrgulella, cylindracea, mitis (Monts. mss.) spp. n. *P. brevicula* Monts. v. *rejecta* (Monts. mss.) var. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. iv.

Strombiformidae, COTTON & GODFREY 203.

Strombiformis williamsi, broadbentae spp. n. S. Australia, COTTON & GODFREY S. Aust. Nat. Adelaide 14 1 1932 pp. 39, 40 pl. i f. 19, 20.

Stylifer stylifer, LÖNNBERG 507.

Stiliferidae, COTTON & GODFREY 203.

†*Subulites acutus* sp. n. Ordovician Ontario, A. E. WILSON Tr. R. S. Can. 3 26 iv 1932 p. 403 pl. vi.

Syrnola Ad. 1860 *unisulcata* pl. i f. 6 (not *S. jonesiana* Tate 1898), *S. elliotiae* pl. i f. 7 spp. n. S. Australia, COTTON & GODFREY S. Aust. Nat. Adelaide 14 1 1932 pp. 22, 23.

†*Tenuiscala rosenkrantzi* pl. iii, f. (8, 9, 10) a-b, *T. (Cerithiscala) tricineta* pl. iii f. 12 a-b spp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 89.

Turbonilla hofmani Angas 1877 = *T. nitida* Angas 1867 **preoc.**, COTTON & GODFREY 203.

†*Turbonilla elongatissima* (Foresti in Schaed.) sp. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 98 pl. vii (i) f. 20.

NUCLEOBRANCHIATA. PTEROPODA.

Cavolinia longirostris, *gibbosa*, *inflexa*, *tridentata*, *uncinata*, MASSY 529.

Cavolinidae, COTTON & GODFREY 204.

Clio pyramidalis sp. n. ? ex Voyage de l'Astrolabe Zool. I, II 2^e pt. 1833 (p. 371 pl. xxvii f. 37), PRUVOT-FOL Arch. Zool. exp. gén. Paris 74 1932 p. 508.

Clodita caduceus fusiformis spp. n. ? ex Voy. de l'Uranie (p. 413 pl. lxvi (f. 1) (f. 2, 3)), PRUVOT-FOL Arch. Zool. exp. gén. Paris 74 1932 p. 507.

Cleodora sulcata, *pyramidata*, *cuspidata*, *balantium*, *falcata*, MASSY 529.

Cliome limacina, J. A. GRIEG 337.—*Cliome antarctica*, *krohnii*, MASSY 529.—*Cliome antarctica* E. A. Smith Radula and Anatomy, PRUVOT-FOL 709.

Cliopsis krohnii, MASSY 529

†*Conularia slateri* p. 355, pl. xix f. 2 a-c; *mirifica* p. 356 pl. xix f. 1 a-b; *cunctata* p. 357 pl. xix f. 3 a, b; *asteroidea* p. 357, pl. xix f. 4, 4a, Upper Bala Bed, Girvan, REED Geol. Mag. London Aug. 1933 70 830.—*Conularia wurthi*, HOSKING 358.

Cymbulia peroni, *intermedia*, MASSY 529.

†*Helenia bella* fig., POULSEN 690.

Hyalocylix (*Creseis*) *striata* Rang vide etiam *Styliola*, MASSY 529.

†*Hyalithellus micans* figs., POULSEN 690.

Hyalithus (*Orthotheca*) *communis*, *fistula*, *americanus*, *billingsi*, *similis*, *mutatus* figs., POULSEN 690.

Limacina helicina, *retroversa*, J. A. GRIEG 337.—*L. helicina*, *balea*, *retroversa* *helicoides*, *bulimoides*, MASSY 529.

Pelagia alba ex Voy. de l'Astrolabe "Clio. p. 392 pl. xxviii f. 7. 8" = ? *Thliptodon*, PRUVOT-FOL 709.

Peraclis diversa, MASSY 529.

Pneumoderma atlanticum MASSY 529.

Pneumodermon peronii ex Voy. de l'Astrolabe "Clio. p. 387 pl. xxviii f. 1-6" (*Pneumoderma atlanticum* Oken = *violaceum* Aucts = *P. peroni* Lk. : *P. ruber* Voy. l'Astr.) p. 389 pl. xxviii f. 19, 20, PRUVOT-FOL Arch. Zool. exp. gén. Paris 74 1932.

Pneumoderhapsis macrochira, MASSY 529.—*P. ciliata* anatomy figs. pl. iii, PRUVOT-FOL 709.

Procymbulia valdiviae, MASSY 529.

Pruvotella gen. n. of Cliopsidae for *Pneumodermon pellucidum* Q. & G. and ? *P. ruber* Q. & G., PRUVOT-FOL Arch. Zool. exp. gén. Paris 74 1932 p. 512 fig.

Schizobrachium polycotylum, MASSY 529.—*S. polycotylum* radula figs. pl. iii, PRUVOT-FOL 709.

Spongiobranchaea australis, *intermedia* figs. pl. xxxix, MASSY 529.

†*Stenotheca* (?) *manchurica* sp. n. Ordovician Japan, KOBAYASHI J. Fac. Sci. Univ. Tokyo Geol. Min. (2) 3 7 1933 p. 265 pl. v f. 6.—*S. (?) manchurica* Wanwankow dolomite S. Manchuria, KOBAYASHI J. Fac. Sci. Univ. Tokyo Geol. 3 7 1933 p. 265 pl. v f. 6.

Styliola (*Creseis*) *subula* Quoy & Gaimard vide etiam *Hyalocylix*, MASSY 529.

†*Tentaculites crotalinus* Salter fig., FERUGLIO 280.

Thliptodon gegenbauri diaphanus, MASSY 529.

STENOGLOSSA.

(a) RHACHIGLOSSA.

CORALLIOPHILIDAE, BUCCINIDAE, NASSARIIDAE, MURICIDAE, THAIDIDAE, PYRENIDAE.

Amycla corniculum Olivi v. *luteostoma* var. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. viii.

†*Anachis corrugata* Bell. *terebralis* Grat. figs., MEZNERICS 537.

†*Antiazafa wairarapa* sp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933 p. 346 f. 10.

Bolinus brandaris L. vars. *folii* (Monts. mss.), *longispina*, *fragilis*, *adunca*, *cingulata*, *bicaudata*, *ecaudata* vars. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. v.

Buccinidae of Amoy, YEN 952.

Buccinulum waitangiensis sp. n. Chatham Islands, POWELL Rec. Auckland Inst. Mus. 1 4 1933 p. 205 pl. xxxvi f. 12, 13.

Buccinum bayani, tenuissimum, *B. rossicum taubai*, TERAMACHI 882.—*B. undatum*, F. BROCK 131.

†*Buccinum paramushiruense* sp. n. Kurile Ids., NOMURA Jap. J. Geol. Geog. Tokyo 11 1–2 1933 p. 9 pl. i f. 2, 2a.—*B. (Latrunculus) loandense* p. 91 pl. v f. 17; *B. (Tritonidea ?) angolense* p. 92 pl. v f. 15; *B. (Luizia) costae* “nov. gen. et sp.” p. 92 pl. v f. 12–14 spp. n. Tertiary Loando W. Africa, DOUVILLÉ Bol. Mus. Lab. Min. Geol. Univ. Lisbon 12 1933.—*B. (?) languinei* sp. n. Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3–4 1933 p. 70 (158) pl. ix f. 23.

†*Bullia (Adinus) bantamensis* f. 4–6, *B. (A.) litoralis* f. 7 spp. n. Pliocene Java, OOSTINGH Mijningenieur 11 Nov. 1933 pp. 195–196.

Centrifuga lecana Dall. figs., STRONG, HANNA & HERTLEIN 860.

Columbella albuginosa rietensis nom. nov. for *C. a. major* Turton, TURTON Mar. Shells Port Alfred Feb. 1933.—*C. rustica* L. v. *syriaca* (Monts. mss.) var. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. vii.

†*Columbella elongata laevigata* var. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 88 pl. vii (i) f. 13.

Columbellidae of Amoy, YEN 952.

Cominella (Eucominia) ellisoni conso-brina subsp. n. Chatham Islands, POWELL Rec. Auckland Inst. Mus. 1 4 1933 p. 206 pl. xxxvi f. 8.

†*Cominella mayeri* sp. n. Ypresien Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 51 pl. iv.—*C. (Acominia) scirifer* sp. n. Tertiary N.Z., C. R. LAWS Tr. Pr. N.Z. Inst. 63 3 1933 p. 323 f. 29, 33.

†*Cominista putangirua* sp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933 p. 345 f. 13.

†*Coralliophila barbadensis* sp. n. low level Coral rock Barbados, TRECHMANN Geol. Mag. London Jan. 1933 p. 39 pl. iv f. 12, 13.

†*Cronia tengawaica* sp. n. Tertiary N.Z., C. R. LAWS Tr. Pr. N.Z. Inst. 63 3 1933 p. 325 f. 34, 37.

Drupa (Maculotriton) buitendijki sp. n. Manvekwar, N. Guinea, CH. BAYER Zool. Meded. Leiden 16 1933 p. 77 pl. i f. 1.

Euthria cornea L. *canaliculata* (Monts. mss.) var. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. viii.

Hadriania brocchii Monts. v. *carinata* var. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. vii.

†*Hindsia palembangensis* sp. n. Neogene Sumatra, HAANSTRA & SPIKER Pr. Acad. Sci. Amsterdam 35 10 1932 p. 1320 figs. 13–15.

Ilyanassa Antipolar lobe in, T. H. MORGAN 567.

†*Johnstrupia* gen. n. of Columbelloidea for *J. favensis* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 pp. 60, 61 fig. pl. vi f. 3 a–b.

†*Latrunculus canaliculatus* figs., NARDINI 588.

(*Luizia*) “nov. gen.” [subgen. n.] of *Buccinum* q.v. sole sp. *costae* sp. n., DOUVILLÉ 251.

Metula amosi Vanatta fig. STRONG, HANNA & HERTLEIN 860.

Murex brassica fig.; *M. nigrospinosus* fig., J. K. ALLAN 18.—*M. trunculus* egg capsules, FISCHER & RAFFY 283.—*M. trunculus*, JULLIEN & MORIN 403a.—*M. tenispina* fig., KÜHNELT 448a.—*M. trunculus*, *brandanus* [Br. isolated], chemical contents, LISON 504a.—*M.* effect of temperature, J. H. ORTON 623.—*M. erinaceus*, PIÉRON 668.—*M. trunculus*, *brandaris*, POURBAIX 691.—*M. (Acupurpura) triremis*, TAKI 873.—*M. trunculus*, TUZET 900.

Muricidae of Amoy, YEN 952.

Muricopsis blainvillei Payr. *b. hispida*, *b. horrida*, Monts.; *b. spinulosa*, *b. oblonga* (Stalio mss.) vars. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. vi.

Nassa (Hinia) mammillato Risso, v. *abnormis*, m. *acutior*, m. *deformis*, vars. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. viii.—*Nassa (Phrontis) cinisculus beltrani* p. 154 pl. vi f. 1 var. n. Santa Catalina; *N. (Alectryon) dautzenbergi* p. 154 pl. vi f. 2 sp. n. Desconocida; *N. s.s. helleri* Preston

(in sch.); *N. (Niotha) labordei* Jous-seaume (in sch.); *N. (Hebra) quadrasi* Hidalgo; *N. (H.) solida* Reeve (in litt.?), *N. vibex* Rve. Conch. Icon. pl. xii f. 81 (as in Say, fide Paetel); *N. s.s. soror* Preston (in sch.), MARI Buttl. Inst. catal. Hist. nat. (2) 8 1928.—*Nassa pyramidalis rufanensis* nom. nov. for *N. p. affinis* Turton, TURTON Mar. Shells Port Alfred Feb. 1933.—*Nassa mutabilis, reticulata, costulata, granum, incrassata, pymaea, limata, denticulata, clathrata*, Peninsular Balcárica, MARI 523.—*N. incrassata* abnormal fig. M. ROTARIDES 765.

†*Nassa sopora* sp. n. Miocene New Jersey, PILSBRY & HARBISON Proc. Acad. Nat. Sci. Philad. 85 1933 p. 114 pl. iv f. 9, 10.

Nassariidae of Red Sea and G. of Aden, BISACCHI 100.

Nassarius (Zeuxis) isseli sp. n. Red Sea p. 57 fig.; *N. (Hima) beccarii* sp. n. p. 61 figs. Red Sea, BISACCHI Ann. Mus. Stor. nat. Genova 55 1930 [1932].—*N. (Telasco) thaumasius* Sturany Radula figd., BISACCHI 100.

†*Nassarius (Alectrion) bantamensis* pp. 193–194 f. 2, *N. (A.) insulindicus* pp. 194–195 f. 3, spp. n., OOSTINGH Mijningenieur 11 Nov. 1933.

Nassidae [= Nassariidae], MARI 523.
—Nassidae of Amoy, YEN 952.

Neptunea despecta, J. A. GRIEG 337
—*N. constricta*, TERAMACHI 882.

Nucella lapillus [colouration], BURTON 141.

Ocenebra erinaceus L. triquetra, *ther-sites* vars. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl.—*Ocenebra erinacea*, J. H. ORTON 629.

†*Palaeobullia* gen. n. gastropod track (cf. track *Bullia rhodostoma* pl. viii), GÖTZINGER & BECKER Jahrb. geol. Bunde Anst. Wien 82 3–4 1932 pp. 367, 377, 379, pl. vii.

Paratrophon exsculptus sp. n. New Zealand, POWELL Proc. Malac. Soc. 20 4 1933 p. 197 pl. xvi f. 10–14.

†*Phos polygomerus fornasinii* var. n. Neogene Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 83 pl. vii (i) f. 11.

Pisania maculosa Lk. v. *picta* var. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. viii.

Plicifusus aurantius, TERAMACHI 882.

Purpura lapillus, OKLAND 614.—Chemical contents, LISON 504a.—*Purpura* effect of temperature, J. H. ORTÖN 623.—*Purpura lapillus*, PIÉRON 668.

†*Purpura milicentana* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 246 pl. xlviii f. 7–86.

Purpuridae of Amoy, YEN 952.

†*Rapana bulbosa* Sol. prior *mambangensis* n. prior Neogene Sumatra, HAANSTRA & SPIKER Pr. Acad. Sci. Amsterdam 35 10 1932 p. 1320 f. 12.—*R. vaquerosensis* pl., C. St. J. BREMNER 129.

Rapanidae of Amoy, YEN 952.

†*Solenosteira merriami, venturana* spp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 242 pl. xlix.

Sphaeronassa mutabilis (L.) *adriatica* (Monts. mss.), *deformis, umbilicata*, vars. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. vii.

†*Subphyllochora* gen. n. Gastropod track (cf. *Phyllochora, Gyrochora*), GÖTZINGER & BECKER Jahrb. geol. Bunde Anst. Wien 82 3–4 1932 pp. 364, 367, 380.

†*Thais (Stramonita) carrizoensis* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 249 pl. xlvii f. 2–3b.

†*Tritonalia dorrancei* p. 247 pl. xlvii f. 17a–18b; *ynezana* p. 248 pl. xlvii f. 15a–16b spp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932.

Tritonia v. *Sphaerostoma*, WINCKWORTH 941.

Truncularia trunculus L. *aspera* (Monts. mss.), *bulo, tetragona* (Stalio mss.), vars. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. vi.

†*Typhis (Typhinellus) bantamensis* sp. n. Pliocene Java, OOSTINGH Mijningenieur 11 Nov. 1933 pp. 193–194 f. 1.

Urosalpinx effect of temperature, ORTON 623.

†*Zafra opikensis* sp. n. Tertiary N.Z., C. R. LAWS Tr. Pr. N.Z. Inst. 63 3 1933 p. 324.

Zemitrella finlayi sp. n. Chatham Islands, POWELL Rec. Auckland Inst. Mus. 1 4 1933 p. 206 pl. xxxvi f. 6.

†*Zephus onokeana* sp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933 p. 345 f. 14.

Zeuxis (Hima) pygmaea L. v. coëni Monts., COEN pl. viii 183.

TURBINELLIDAE, FASCIOLARIIDAE, MITRIDAE, VOLUTIDAE, MARGINELLIDAE, HARPIDAE, OLIVIDAE.

Aptyxis syracusanus L. v. abbreviata var. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. viii.

†*Athleta (Volutocorbis) thebaica* sp. n. Eocene Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 59 pl. vii.

Austroharpa pulligera (Tate), *spirata* (Tate), *sulcosa* (Tate), *tatei* Finlay (? = *sulcosa* var.), *tenuis* (Tate), *clathrata* (Tate), *punctata* (Verco), *pachycheila* (Tate), *cassinoides* (Tate), *exquisita* (Iredale), *abbreviata* (Tate), COTTON & WOODS 207.—*Austroharpa* Finlay May 1931 type *H. pulligera* Tate = *Dentharpa*, *Tramharpa* [nn. nud.] and *Palamharpa* Iredale June 1931, COTTON & WOODS 207.

†*Austrofusus clavicularis* p. 342 f. 5, *incertus* p. 843 f. 4, *cottoni* p. 343 f. 21, *marshalli* p. 344 f. 29; *A. (Neocola) marwicki* p. 344 f. 15, spp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933.

†*Buccinofusus ? parvus* p. 63 pl. vii f. 1. a-b, ? *subglaber* p. 63 pl. vii f. 4 a-b spp. n. Cretaceous Denmark, RAVN K. danske Selskr. Skr. (9) 5 2 1933.

Busycon canaliculatum, KRAJNÍK 437.—*B. canaliculatum*, hemocyran, ROCHE 755.

†*Clavilithes humei* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 54 pl. v.—*C. macrospira major* var. n. Eocene Transcaucasia, ISAEVA Trans. Geol. Prosp. Serv. U.S.S.R. 305 1933 p. 45 pl. iv f. 17.

†*Conomitra guizehensis* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 57 pl. viii.

Eocithara Fischer 1883 type *H. mutica* Lk. = *Refuharpa* Iredale [nom. nud.] June 1931, *E. lamellifera* (Tate), COTTON & WOODS 207.

Fusus rostratus Olivi *bicanalifera* var. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. viii.

†*Fusus baraensis* p. 66 (154) pl. ix f. 12-16; *F. ? dereimsi* p. 69 (157) pl. ix f. 21 spp. n. Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3-4 1933.—*F. cairensis, arabicus* spp. n. Eocene Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 52 pl. v.—*F. (Levifusus) angolensis* sp. n. p. 77 pl. iii f. 3 a-b; *F. (L.) a. ornatissima* race nov. p. 78 pl. iii f. 6; *F. (L.) a. intermedia* var. nov. p. 79 pl. iii f. 4, 5 Tertiary Loanda W. Africa, DOUVILLÉ Bol. Mus. Lab. Min. Geol. Univ. Lisbon 1 2 1933.—*F. vincenti* sp. n. Belgium, GLIBERT Mém. Mus. Roy. Hist. nat. Belg. 53 1933 p. 75 pl. iv f. 8.—*F. (Levifusus) tuberculatus* sp. n. Eocene Transcaucasia, ISAEVA Trans. Geol. Prosp. Serv. U.S.S.R. 305 1933 p. 42 pl. iv f. 10-13.

Harpa gracilis fig., J. K. ALLAN 18.

†*Iredalina finlayi* sp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933 p. 347 f. 23-25.

†*Lyria subcrassicosata* sp. n. Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3-4 1933 p. 63 (151).—*L. pindborgi* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 67 figs.

Marginella piperata becki for *M. p. lineata* Sow., *M. p. helena* for *M. p. strigata* Sow., *M. teres* for *M. tenuis* Turton.; nomm. nov., TURTON Mar. Shells Port Alfred Febr. 1933.—*M. californica*, LOWE 513.

Melo indica, MEER MOHR 551.

Melongena corona inspinata var. n. Sarasetta Fla. G. of Mexico, RICHARDS Nautilus 47 2 1933 p. 57.—*M. pugilina*, MEER MOHR 551.—*M. pugilina, galeodes*, TALAVERA & FAUSTINO 879.

†*Melongena (Cornulina) brevis* sp. n. Tertiary Loanda W. Africa, DOUVILLÉ Bol. Mus. Lab. Min. Geol. Univ. Lisbon 1 2 1933 p. 80 pl. iii f. 7 a-b, 8 a-b.—*M. subcarinata*, HOHL & POLLAK 378.

Mitra tomlini for *M. perexilis* Turton; *M. becki* for *M. helena* Turton; nomm. nov., TURTON Mar. Shells Port Alfred Feb. 1933.—*M. zaca* sp. n. Acapulco, STRONG, HANNA & HERTLEIN Proc. Calif. Acad. Sci. (4) 21 10 1933 p. 120 pl. v f. 10.

Oliva erythrostoma fig., J. K. ALLAN 18.

†*Olivella elongata* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 60 pl. viii.—*O. santana* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 240 pl. xlv f. 10–12.—*O. tomlini* sp. n. Pliocene Java, OOSTINGH Mijningenieur 12 Dec. 1933 pp. 212–213 f. 3.

Olividae of Amoy, YEN 952.

Pachymelon (Palomelon) wilsonae sp. n. Chatham Islands, POWELL Rec. Auckland Inst. Mus. 1 4 1933 p. 204 pl. xxxvi f. 18.

†*Pirifusus ? globulosus* sp. n. Cretaceous Denmark, RAVN K. danske Selskr. Skr. (9) 5 2 1933 p. 62 pl. vii f. 2 a–b.

†*Semifusus (Mayeria ?) sachalinensis* sp. n. Cretaceous Japan, NAGAO J. Fac. Sci. Hokkaido Imp. Univ. 4 2 1 1932 p. 47 pl. vii f. 8–10.—*S. libycus* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 53 pl. vii.

†*Spinomelon evelynae* sp. n. Tertiary N.Z., C. R. LAWS Tr. Pr. N.Z. Inst. 63 3 1933 p. 326 f. 20, 27.

†*Strepsidura turgida belgica* var. n. Bartonian Belgium, GLIBERT Mem. Mus. Roy. Hist. nat. Belg. 53 1933 p. 70 pl. iv f. 4.

†*Streptochetus nilensis* sp. n. Belgium, GLIBERT Mém. Mus. Roy. Hist. nat. Belg. 53 1933 p. 76 pl. iv f. 10.

†*Tudicula ramses, thebaica, libyca* spp. n. Eocene Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 pp. 55–56 pls. v, vi.

Turbonilla (Tragula) fenestrata Jeff. var. *turbifacta* (Monts. mss.) var. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933.

†*Turricula (Fusimitra) subglabra* p. 65 pl. vi f. 8 a–b, *glabra* p. 65 pl. vii f. 5 a–b, *faxensis* p. 66 pl. vii f. 6 a–b spp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933.

Voluta africana rietensis nom. nov. for *V. a. ponderosa* Turton, TURTON Mar. Shells Port Alfred Feb. 1933.—*Voluta musica* fig., J. K. ALLAN 18.

†*Voluta sakondryi* sp. n. Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3–4 1933 p. 57 (145) pl. viii f. 26, 28.

Volutidae of Amoy, YEN 952.

†*Volutilithes guizehensis* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 58 pl. viii.—*V. stephaniae* sp. n. Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3–4 1933 pl. viii f. 31, 32.

†*Volutocorbis texana* (ex Gardner MS.), *olssoni, stenzeli* spp. n., *dalli smithvillensis, wheelockensis bastropensis, lisbonensis wechesensis, l. crockettensis, wheelockensis sabinensis* vars. n. Eocene Texas, F. B. PLUMMER Bull. Univ. Texas 3232 July 1933 pp. 813, 814 pl. ix.—*V. limopsis, rugatus, saffordi* figs. Eocene Texas, F. B. PLUMMER 685.

†*Volutomorpha brasiliensis* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. e min. Brasil 8 1930 p. 203 pl. ix f. 4.

STENOGLOSSA.

(b) TOXOGLOSSA.

TURRIDAE, TEREBRIDAE, CONIDAE, CANCELLARIIDAE, HALIIDAE.

†*Acrilla mardachayensis* sp. n. Eocene Transcaucasia, ISAEVA Trans. Geol. Prosp. Serv. U.S.S.R. 305 1933 p. 50 pl. iv f. 26, 27.

†*Admete (Bonellitia) pharaonica* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 61 pl. viii.—*A. nassiformis spinosa* var. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 104 pl. vii (i) f. 22.

†*Austrodrillia alpha* p. 349 f. 6, *beta* p. 349 f. 7, *gamma* p. 350 f. 8 spp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933.

†*Awateria retiolata* f. 12, *mollyae* spp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933 p. 351.

†*Borsonia ? nilotica* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 65 pl. vi.

†*Cancellaria shilohensis* sp. n. Miocene New Jersey, PILSBRY & HARBISON Pr. Acad. Nat. Sci. Philad. 85 1933 p. 108 pl. iii f. 8.

Cancellariidae of Amoy, YEN 952.

Chelyconus mediterraneus Brug. pro-
ducta, turrita (Monts. mss.) vars. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. ix.

†*Clathromangilia libyca* sp. n. Bar-
tonian Egypt, CUVILLIER Mem. Inst.
Egypt 22 1933 p. 62 pl. viii.

†*Clavatula pyramidum* sp. n. Bar-
tonian Egypt, CUVILLIER Mem. Inst.
Egypt 22 1933 p. 64 pl. v.

†*Comitas abnormis* p. 348 f. 17,
onokeana p. 348 f. 16, *imperfecta* p. 349
f. 2, spp. n., L. C. KING Tr. Pr. N.Z.
Inst. 63 3 1933.

Conus nussatella fig., J. K. ALLAN 18.
—*Conus ebraeus*, litteratus, millipuncta-
tus, GALTISOFF 308.—*C. fergusonii* at
Magdalena Bay, G. of California, LOWE
511.

†*Conus (Lithoconus) piruloides* sp. n.
Tertiary Loanda W. Africa, DOUVILLÉ
Bol. Mus. Lab. Min. Geol. Univ. Lisbon
1 2 1933 p. 90 pl. v f. 8, 9.—*C. suma-
trensensis* sp. n. Neogene Sumatra, HAAN-
STRA & SPIKER Pr. Acad. Sci. Amster-
dam 35 10 1932 p. 1316 f. 3, 4.—*C.
oveniana ynezanus* var. n. Miocene
California, LOEL & COREY Univ. Calif.
Pub. Geol. 22 3 1932 p. 237 pl. xlvii
f. 1a, b.—*C. (Hemiconus) granularis*
fig., MEZNERICS 537.

†*Cymatosyrinx polycyma* p. 110 pl. iii
f. 7; *C. pseudeburnea* p. 111 pl. iii
f. 4, 5; *C. whitfieldi* p. 112 pl. v f. 2,
spp. n. Miocene New Jersey, PILSBRY &
HARBISON Proc. Acad. Nat. Sci. Philad.
85 1933.

†*Drillia douvillei* sp. n. Cretaceous
Madagascar, BASSE Ann. Paléont. Paris
21 3-4 1933 p. 55 (143) pl. viii f. 23, 24.
—*D. paucinoda* sp. n. Tertiary Loanda
W. Africa, DOUVILLÉ Bol. Mus. Lab.
Min. Geol. Univ. Lisbon 1 2 1933 p. 84
pl. iv f. 17.—*D. plaebangensis* sp. n.
Neogene Sumatra, HAANSTRA & SPIKER
Pr. Acad. Sci. Amsterdam 35 10 1932
p. 1317 f. 5, 6.—*D. oppenorthi* sp. n.
Pliocene Java, OOSTINGH Mijningenieur
11 Nov. 1933 pp. 195-196 f. 8.—*D.
zboroviensis* fig., MEZNERICS 537.

†*Daphnella (Bellardiella) gracilis* fig.,
MEZNERICS 537.

Eudaphnella nom. nov. for *Eudaphne*
Bartsch non Reuss (Entom.), BARTSCH
Nautilus 47 2 1933 p. 76.

Filodrillia studiosorum sp. n. Tertiary
N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63
3 1933 p. 350 f. 9.

†*Genotia (Dolichotoma) felsinea*
(Foresti in sched.) sp. n. Neogene Italy,

SANGIORGI Giornale di Geol. Bologna
(2) 1 1926 p. 75 pl. vii (i) f. 6.

†*Glyphostoma subflexuosum* sp. n.
Miocene New Jersey, PILSBRY & HAR-
BISON Proc. Acad. Nat. Sci. Philad. 85
1933 p. 112 pl. iii f. 6.

†*Hemizygga ? cancellata* n. sp. [nom.
nud.], SAYRE 780.

Insolentia solitaria sp. n. Tertiary
N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63
3 1933 p. 350 f. 11.

†*Kurtziella precerina* sp. n. Miocene
New Jersey, PILSBRY & HARBISON
Proc. Acad. Nat. Sci. Philad. 85 1933
p. 113 pl. iii f. 13, 14.

†*Mangilia (Homotoma) sulcata*
(Foresti in sched.) sp. n. Tertiary Italy,
SANGIORGI Giornale di Geol. Bologna
(2) 1 1926 p. 79 pl. vii (i) f. 7.

†*Mitrella communis mediocris* subsp.
n. Miocene New Jersey, PILSBRY &
HARBISON Proc. Acad. Nat. Sci. Philad.
85 1933 p. 114 pl. iv f. 16.

†*Ootomella* [Turridae] nom. nov. for
Ootoma Koperberg (non Dejean, non
Blanchard) type *Ootoma jonkeri* Koperb.,
BARTSCH Nautilus 47 2 1933 p. 76.

†*Perronia angolensis* sp. n. Tertiary
Loanda W. Africa, DOUVILLÉ Bol. Mus.
Lab. Min. Geol. Univ. Lisbon 1 2 1933
p. 83 pl. iv f. 6-10.

Philbertia leufroyi, linearis, LEBOUR
489.—*Philbertia (Comarmondia) gracilis*
eggs and larvae figd., LEBOUR 492.

†*Pleuroliria ultima* sp. n. p. 109 pl. v
f. 3; *P. u. foxi* subsp. n. p. 110 pl. v f. 1
Miocene New Jersey, PILSBRY & HAR-
BISON Pr. Acad. Nat. Sci. Philad. 85
1933.

Pleurotoma n. sp. aff. (*Clavatula*)
nataliae Hörnes & Auinger fig. Tertiary
Europe, KÜHNEL p. 89 454.

†*Pleurotoma sumatrana* f. 7, 8, *erbi*
f. 9-11 spp. n. Neogene Sumatra,
HAANSTRA & SPIKER Pr. Acad. Sci.
Amsterdam 35 10 1932 p. 1318.—*P.
(Clavatula) oppenheimi* sp. n. Miocene
Greece, MITZOPOULOS Prak. Akad.
Atheron Athens 7 1 1932 p. 25 fig.—*P.
elegantula* (Foresti in sched.) sp. n.
Neogene Italy, SANGIORGI Giornale di
Geol. Bologna (2) 1 1926 p. 70 pl. vii (i)
f. 4.

Pleurotomidae [= *Turridae*] of Amoy,
YEN 952.

†*Rhaphitoma savenae* sp. n. Neogene Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 81 pl. vii (i) f. 9.

†*Scabrella bronni* fig., MEZNERICS 537.

†*Sportella whitfieldi* sp. n. Miocene New Jersey, PILSBRY & HARBISON Proc. Acad. Nat. Sci. Philad. 85 1933 p. 119 pl. v f. 7.

†*Surcula loandensis* sp. n. Tertiary Loanda W. Africa, DOUVILLÉ Bol. Mus. Lab. Min. Geol. Univ. Lisbon 1 2 1933 p. 83 pl. iv f. 11-16.—*S. transversaria transcaucasica*; *S. (Ancistrosyrinx) terebralis abichi* vars. n. Eocene Transcaucasia, ISAEVA Trans. Geol. Prosp. Serv. U.S.S.R. 305 1933 p. 47 pl. iv.—*S. ? pusilla* sp. n. Cretaceous Denmark, RAVN K. dansk Selsk. Skr. (9) 5 2 1933 p. 70 pl. vii f. 12 a-b.—*S. chinensis* (Bon.) *ecostata* var. n. Tertiary Italy, SANGIORGI Giornale di Geol. Bologna (2) 1 1926 p. 72 pl. vii (i) f. 5.

Terebra (subgenus = ?) *santana* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 236 pl. xlvii f. 8-11.

†*Terebra (Myurella) bivittata* sp. n. Tertiary Loanda W. Africa, DOUVILLÉ Bol. Mus. Lab. Min. Geol. Univ. Lisbon 1 2 1933 p. 95 pl. vii f. 6, 7, 8.

Terebridae of Amoy, YEN 952.

†*Tessarolax acutimarginatus* sp. n. Cretaceous Japan, NAGAO J. Fac. Sci. Hokkaido Imp. Univ. Japan (4) 2 1 1932 p. 43 pl. vi f. 10-15.

†*Turricula (Uromitra) schafferi* sp. n. *vindobonensis*, MEZNERICS Ann. naturh. Mus. Wien 46 1932-33 pp. 319-359.

†*Uxia pyramidum* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 60 pl. viii.

†*Zeacuminia cantuariensis* sp. n. Tertiary N.Z., C. R. LAWS Tr. Pr. N.Z. 63 3 1933 p. 327 ff. 26, 28.

Opisthobranchia.

Acanthodoris pilosa fig., LABBÉ 471.

Acera bullata in Suffolk, DOUGHTY 248.

Aclesia longicauda figs. tentacles, PRUVOT-FOL 712.

†*Actaeon aegyptiacum* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 65 pl. vii.

†*Actaeonella luciano* p. 257, *pompei* p. 259, *tamandarensis* p. 261, spp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. e min. Brasil 8 1930 pl. x.

Acteonidae, COTTON & GODFREY 203.

Actinocyclus japonicus (Eliot) fig., K. BABA 55.

Aegires punctilucens, C. DONS 245.

Aeolididae, COTTON & GODFREY 204.
—PRUVOT-FOL 711.

Aeolis papillosa Suffolk, E. A. ELLIS 260.

*Aglai*a *taronga* p. 144 pl. lvi f. 1-3, *sanguinea* p. 445 pl. lvi f. 6-8 spp. n. (types Australian Mus.) N.S. Wales, J. K. ALLAN Rec. Aust. Mus. Sydney 18 9 1932.—*Aglai*a genotype designated, *A. tricolorata* Renier, J. K. ALLAN 19.

Aglajidae = Doridiidae, COTTON & GODFREY 204.

Akeratidae, COTTON & GODFREY 204.

Akeridae of Amoy, YEN 952.

Aplysia saltator Forbes, ENGEL 263.
—*Aplysia limacina*, HORSTADIUS 380.
—*A. limacina* experiments on, JORDAN & LULLIES 400.—*A. rosea*, LÖNNBERG 507.

Aplysiidae, PRUVOT-FOL 711.

Aplustridae, COTTON & GODFREY 204.

Archidoris o'donoghuei sp. n. Gulf of Suez, PRUVOT-FOL Mém. Inst. Egypt 21 1933 p. 118 pl. ii f. 18-22.—*A. o'donoghuei* sp. n. [Suez ?], PRUVOT-FOL Bull. Inst. égypt. 15 2 1933 p. 147.

Argidae, COTTON & GODFREY 204.

Armina papillata sp. n. Amakusa Japan, K. BABA Annot. zool. jap. 14 1933 p. 174 fig.—*A. semperi* Bergh *erythraea* var. n. Gulf of Suez, PRUVOT-FOL Mem. Inst. Egypt 21 1933 p. 111, pls. i f. 4-6; iv f. 45-50.—*A. semperi erythraea* var. n. Suez, PRUVOT-FOL Bull. Inst. Egypt 15 2 1933 p. 146.—*Armina variolosa* infested by a species of *Ammothea*, OHSHIMA 609.

Asteronotus hemprichi fig., PRUVOT-FOL 713.

Atopos australis (Heynemann) fig., T. v. B. JUTTING 405.

†*Avellana problematica* sp. n. Cretaceous Japan, NAGAO J. Fac. Sci. Hokkaido Imp. Univ. 4 2 1 1932 p. 50 pl. vii f. 7 a-b.—*A. problematica* sp. n. Cretaceous Japan, NAGAO J. Fac. Sci. Hokkaido Imp. Univ. Japan (4) 2 1 1932 p. 50 pl. vii f. 7 a-b.

Berthella granulata figs. rad., PRUVOT-FOL 713.

Buchanania ? *reticulata*, T. MINGUEZ 544.

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Cephalopyge orientalis sp. n. Japan, K. BABA Annot. zool. jap. 14 1933 pp. 157-160 pl. vii.

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Discodoris palma sp. n. (type Aust. Mus.) Pussy-Cat Bay, Botany Bay, N.S.W., J. K. ALLAN Rec. Aust. Mus. 18 9 1932 p. 448 pl. lvi f. 11-12.

Dolabrifera tentacles figs., PRUVOT-FOL 712.

Doriopsidae, COTTON & GODFREY 204.

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Doridium seurati Vayssière 1926 figs., VAYSSIÈRE 909.

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Euselenops amboinei pls., PRUVOT-FOL 713.

Firola coronata fig., L. BOONE 122.

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p. 147, *dollfusi* sp. n. p. 148 Suez, PRUVOT-FOL Bull. Inst. égypt. 15 2 1933.—*Glossodoris albomaculata* Rad. fig., *quadricolor* pl., PRUVOT-FOL 713.

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Goniodoris (*Goniodoridella*) *savignyi* sp. n. Gulf of Suez, PRUVOT-FOL Mém. Inst. Egypt 21 1933 p. 117 pl. ii f. 23-26.—*G. (Goniodoridella) savignyi* sp. n. Suez, PRUVOT-FOL Bull. Inst. égypt. 15 2 1933 p. 146.

Haminoea virescens rosacea var. n. San Diego Calif., V. SPIGER Nautilus 47 2 1933 p. 53.—*H. virescens*, PILSBRY 673, SPIGER 841, TOMLIN 892.

Hedyle amboinensis, weberi, BÜCKING 127.

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Lomanotus ? *vermiformis* Eliot 1908 figs. of jaw of rad. and gizzard, PRUVOT-FOL 713.

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Nembrotha livingstonei sp. n. (type Aust. Mus.), J. K. ALLAN Rec. Aust. Mus. 18 9 1932 p. 450 pl. lvi f. 15.

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Nudibranchiata of Ceylon, Kelaart's work on, O'DONOGHUE 604.

Oncidiella patelloides Q. & G., *maculata* Plte, LABBÉ 473.—*O. celtica*, A. LABBÉ 473a.—*O. celtica* Cuv. = *O. nana* Carus fig., SEURAT 809.—*O. celtica*, SEURAT & DIEUZEIDE 810.

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Philine catena Montagu 1804 figs., VAYSSIÈRE 909.

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Pleurobranchaea (genotype designated
P. mackellii Blainville) *dorsalis* sp. n.
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†*Ringicula* (*Ringiculina*) *ninohensis*
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†*Scaphander scapha* sp. n. Tertiary
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BARNARD Jour. Conch. 19 9 1933 p. 294
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†*Volvaria bulloides belgica* var. n.
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Aleria monodon sp. n. Venice, COEN
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†*Limnaeus (Acella) subtilis* sp. n. Serbia, PAVLOVIC Bull. Soc. Sci. Skopljje 9 1931 p. 17 pl. v f. 8-10.—*L. obrutschewi* fig., KRYSHTOFOVICH 448.

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Physa halei self-fertilization and nidification, F. C. BAKER 64, 65.—*P. acuta* Physiology and Psychology, P. fontinalis, FABRE-DOMERGUE 267.—*P. latchfordi*, LA ROCQUE 484.—*P. am-pullacea* Gld., SCHEFFER 782.

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†*Vorticifex laxus* sp. n. Pliocene Utah, R. V. CHAMBERLAIN & E. BERRY Nautilus 47 1 1933 p. 26 pl. v f. 5.

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Agriolimax agrestis glands, ADAM 4.

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Amalia santosi sp. n. Santa Cruz de la Palma Canaries, MINGUEZ Butill. Inst. catal. Hist. nat. (2) 8 1928 pp. 117-120 fig.

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†*Bloyetia peliostoma* figs., NARDINI 588.

Dendronitor gen. n. [non descr.] type *Microcystis inscensa* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 56, 59.

†*Discinella micans* figs., POULSEN 690.

Durgellina fragilis (Schepman) radula fig., J. v. B. JUTTING p. 94 405.

Fastosarion subgen. n. [non descr.] of *Helicarion* for *H[elicarion] superba* Cox P.Z.S. 1871 p. 54 (type *Vitrina* s. p. 57), IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 37, 57.

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Lallemantia Mab. sect of *Milax* s.g. of *Milax*, H. WAGNER 921.

Ledoulxix inflata f. 18, *aethiopica* f. 19 spp. n. Abyssinia, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933 p. 295.

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Mesomphix (*Micromphix*) *subplanus* planus Gt. Smoky Mts. subsp. n., G. S. BANKS Nautilus 47 2 1933 p. 70 pl. vii f. 5-7.

Milax (*Milax*) *adensameri* p. 62 f. 67 Dalmatia; *serbicus* p. 63 f. 8, 9, 10; *M. (Subamalia) taygeticus* p. 67, f. 14 Taygetos-Gebiet, spp. n., H. WAGNER Ann. Naturh. Mus. Wien 46 1932 33.

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Sasakina bicincta sp. n. Sumba I., B. RENSCH SitzBer. Ges. naturf. Fr. Berlin 1932 8-10 1933 p. 498 fig. 2.

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Thapsia magna p. 292 f. 15; *T. paucispirata* p. 293 f. 16, 16a, b; *T. punctata* p. 293 f. 17, spp. n. Abyssinia, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933.

Turrisitala gen. n. [non descr.] type *Helix turriculata* Cox; *T. normalis* nom. n. for *Helix turriculata* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 55, 59.

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Ainohelix subgen. n. of *Fruticola* type "*Helix*" *blakeana* Newcomb, KURODA & TAKI Venus 3 6 1933 p. 323.

Alabastrina marmouchana, tilmiratensis spp. n. Morocco, PALLARY Bull. Soc. H.N. Alger. 24 7 1933 p. 244.

Albea (Cariosula) nokourensis sp. n. Morocco, PALLARY Bull. Soc. H.N. Alger. 24 7 1933 p. 243.

Amimopina gen. n. [non descr.] type *Bulimus beddomei* Brazier, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 42, 57.

Amphidromus ilsa sp. n. Pulu Weh, Sumatra, B. RENSCH Zool. Anz. Leipzig 102 1933 p. 206 fig.

Amplirhagada subgen. n. of *Rhagada* type *Helix sykesi* Smith, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 52, 58.

Annakelea gen. n. type *Helix richmondiana* Reeve, including *H. novae-hollandiae* Gray "with its subspecies" *H. dupuyana* Pfeiffer and *H. mitchellae* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 43, 57.

Archelix (Dupotetia) russadirensis, vanrossomi spp. n. Morocco, PALLARY Bull. Soc. Hist. nat. Alger. 24 7 1933 p. 247.

Arianta arbustorum rudis, THORSON 890.

Arnemelassa gen. n. [non descr.] type *Helix creedi* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 55, 59.

Atlasica tamanarensis sp. n. Morocco, PALLARY Bull. Soc. H.N. Alger. 24 7 1933 p. 243.

Australgibba subgen. n. [non descr.] of *Planispira* type *Helix wesselensis* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 55, 59.

Bentosites gen. n. [non descr.] type *Helix macleayi* Cox p. 44; *B. gavisia* nom. n. for *Helix gratiosa* Cox p. 44; *B. birchi* sp. n. p. 44; *B. blomfieldi sidneyi* p. 45, *b. latior* p. 45 subspp. n. Australia, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. as above, and 57.

Bradybaena similis (Fer.), B. RENSCH 738.

Brazieresta gen. n. type *Bulimus larreyi* Brazier, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 39, 57.

Bulimulus dealbatus, F. C. BAKER 64.

Camaena mamilla crassiventris var. n. Celebes, RENSCH Mitt. zool. Mus. Berlin 19 1903 p. 108 pl. iii f. 4.

Camaena mamilla tirmanica (Anc.), *C. m. m.*, *C. m. papilliformis* Mdf., *C. m. crassiventris* Rensch figs., RENSCH 736.

Campylaea preslii, RIESE 747.

Candidula candidula, STEUSLOFF 853.

Caracolus marginelloides, AGUILAR-AMAT 9.

Catellotrachia subgen. n. [non descr.] of *Semotsachia* [?] type *Hadra winneckeana* Tate, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 52, 58.

Cathaica (Xerocathaica) apollinis nubila subsp. n. Pamir Exp., LINDHOLM Abh. Pamir Exped. 1928 Leningrad 8 1931 p. 58.

Cepolis cepa chocolata var. n. p. 134 pl. viii f. 9, 10, *C. porcellana splendens* subsp. n. p. 137 pl. viii f. 13, 13 a-b, *C. (Plagiptycha) hologyra* p. 138 pl. viii f. 5, 5 a, b, *C. (P.) bondi* p. 139, pl. ix f. 12, 12a, *C. (Coryda) devexa* p. 140 pl. ix f. 10, 10a, 11, 11a, spp. n. Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933.

Chalepotaxis minutis sp. n. N.-W. China, PING & YEN Bull. Fan. Mem. Inst. Biol. 4 6 1933 p. 267 f. 5, 6.

Chloraea thersites vigoensis var. n. Lubang, CLENCH & ARCHER Mich. Acad. Sci. 17 1932 p. 537 pl. lvii f. 4-5.—*C. thersites vigoensis* var. n. Lubang Philippines, CLENCH & ARCHER Pap. Mich. Acad. Sci. 17 1933 p. 537 pl. lvii f. 4-5.

Chloritis (Sulcobasis) atalanta sp. n. Bismarck Archipelago, CLENCH Nautilus 47 1 1933 p. 23 pl. iii f. 9-10.—*C. transversalis conjecta* Sm. Rad. fig., B. RENSCH 735.

Chloritisanax gen. n. type *Helix banneri* Pfeiffer, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 49, 58.

Chloritobadistes gen. n. [non descr.] type *Helix victorise* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 49, 58.

Cepaea subglobosa gravistriata subsp. n. Cretaceous Europe, WENZ Senckenbergiana Frankfurt 15 1, 2 1933 p. 9.—*C. nemoralis, hortensis* glands, ADAM 4. —*C. hortensis* abnormal tentacle, H. BERLIN 92.—*C. nemoralis* fig., HELMCKE 363.—*C. nemoralis*, NILSSON 594.

†*Cepolis (Jeanneretia) torrei* sp. n. Pleistocene Cuba, CLENCH & AGUAYO Nautilus 47 1 1933 p. 22 pl. ii f. 7-8.

Cochlicella acuta, C. G. DOUGHTY 249. —*C. acuta*, G. C. ROBSON 752.

Coloniconcha gen. n. with type *prima* sp. n. Santo Domingo (Camaenidae), H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 143 pl. viii f. 6-8.

Coniglobus, KURODA & TAKI 464.

Divellomelon gen. n. type *Thersites hillieri* Smith, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 51, 58.

Eremina rhodia Chem. reproductive organs fig., BISACCHI 103.

Euhadea tobai sp. n. Japan, HIRASE Dobuts. Zasshi Tokyo 43 1931 pp. 104-110 figs.—Abstr. in Japan. J. Zool. Tokyo 4 1933 p. (94).

Euiberus gualterianus (L.), AGUILAR-AMAT 10.

Eulota zeni p. 258 f. 7, 8; *E. (Cathaca) placenta* p. 272 f. 11, 12, spp. n. N.-W. China, PING & YEN Bull.

Fan. Mem. Inst. Biol. 4 6 1933.—*E. fruticum* glands, ADAM 4.—*E. similis* Fer., LAIDLAW 475.

Exilibadistes subgen. n. [non descr.] of *Meridolum* type *Helix bednalli* Brazier = *sutilosa* Deshayes, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 52, 58.

Eximiorhagada subgen. n. of *Glyptorhagada* type *Xanthomelon asperillum* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 51, 58.

Figuladra subgen. n. [non descr.] type *H. curtisiana* Pfeiffer, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 45, 58.

Fruticicola (Leucozonella) mesoleuca globuliformis subsp. n. Pamir Exp., LINDHOLM Abh. Pamir. Exped. 1928 Leningrad 8 1931 p. 54.

Fruticicolidae Yucatan, BECQUAERT & CLENCH 86; FELIKSIK 278.

Ganesella polygyrata sp. n. Dutch North New Guinea, T. V. B. JUTTING Nova Guinea Leide 17 1 1933 p. 97 f. 21.—*G. japonica* reproductive system, EMURA 262.

Globorhagada subgen. n. of *Rhagada* type *Helix prudhoeensis* Smith, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 52, 58.

Glorengeia gen. n. type *Helix coxeni* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 50, 58.

Gnarosophia gen. n. [non. descr.] type *Helix bellendenkerensis* Brazier; *G. palmensis austrina* nom. n. for *H. meridionalis* Brazier; *G. mitifica* nom. n. for *H. incei* var. *multifasciata* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 46, 58.

Gonobaudinia gen. n. [non descr.] type *Helix baudinensis* Smith, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 55, 59.

Granulomelon gen. n. type *Hadra grandituberculata* Tate, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 51, 58.

Hadra webbi incallida subsp. n. Atherton Tableland, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 43, 57.

Halmatorhagada subgen. n. of *Glyptorhagada* type *Helix bordaensis* Angas, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 51, 58.

Hedleyella falconeri jacksoniana, imitator, subsp. n. Queensland, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 38, 57.

Helicella (*Xeropicta*) *protea marromoustakisi* p. 26 f. 1-2, *H. (Jacosta) syrensis cypria* p. 26 f. 5-6, *H. (J.) s. torocincta* p. 27 f. 8 subsp. n., *H. (J.) ledereri picardi* "n. sp." [subsp. n.] p. 28 f. 9-10 Palestine, HAAS Senckenbergiana Frankfurt 15 1 & 2 1933.—*H. (Candidula) sipylensis* p. 389, *H. (Xerocrassa) cretica smyrnocretica* p. 390 vars. n. Asia Minor, GERMAIN Bull. Mus. Hist. nat. Paris (2) 5 5 1933.—*H. (Trochoidea) pyramidata despotti* var. nov. *Turricula pyramidata* var. *filfolensis* Despott in sc. Filfolia islet off Malta, Soós Arch. Nat. Leipzig (N.F.) 2 1933 p. 336.—*H. ericetorum*, SCHMID 793.—*H. obvia, striata*, MAZEK-FIALLA 534.—*H. (Xerocrassa) pseudosimulata* Germain figd., BISACCHI 103.

Helicidae, FELIKSIK 278.—Helicidae Dallas County, Texas, CHEATUM & BURT 153.—Helicidae, TAKI 878.

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Helicodonta obvoluta glands, ADAM 4.

Helicostyla (*Calocochlea*) *monacha* sp. n. Mindoro p. 539 pl. lvii f. 1; *H. (C.) roissyana bartochi* var. n. Mindoro; *H. (C.) aopta* p. 542 pl. lvii f. 3 sp. n. Mindoro; *H. (Chrysallis) mindoroensis ilogana* p. 545 pl. lviii f. 4; *H. (Ch.) m. furva* p. 546 pl. lviii f. 3; *H. (Ch.) m. flavipellis* p. 548 pl. lviii f. 5; *H. (Ch.) m. orotis* p. 549 pl. lviii f. 1; *H. (Ch.) m. parallaxis* p. 550 pl. lviii f. 2 vars. n. Mindoro, CLENCH & ARCHER Mich. Acad. Sci. 17 1932.

†*Helix* [err. pro *Helix*] *pulchella*, *H. hispida*, *hortensis* figs. p. 45, WERVEKE 934.

Heliopsis subgen. n. type *Helix praticans* Pfr. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 69.

Helix (*Xerophila*) *vestalis* Parr Terichontis n. fa. Palestine, AVNIMELECH Arch. f. Moll. 65 2 1933 p. 67.—*H. frigida sentinensis* [var. n.] Esina, PIERSANTI Boll. Zool. Torino 4 1933 p. 86.—*H. pomatia, aspersa* glands, ADAM 4.—*H. rangiana*, AGUILAR-AMAT 13.—*H. pisana*, ARVANITAKI & CARDOT 43.—*H. pomatia* electrocardiograms, ARVANITAKI & CARDOT 44.—*H. pomatia*,

BASINGER 77.—*H. aspersa* in California, BASINGER 77.—*H. pomatia*, CHANOT, PONTIUS & NIEL 152; CLEMENTS & others 163.—*H. hortensis*, COLOSI 191.—*H. aspersa* distribution in Belgium, FREDERICQ 298.—[*Helix pomatia*], GUILLEMET & SIGOT 345; HORSTADIUS 380; vapour pressure of blood, KAMADA 409.—*H. (Cryptomphalus) aspersa* fig., KÜHNELT 448a.—"*Helix*" *blakeana*, KURODA & TAKI 464.—*H. pomatia*, PELSENER 657.—*H. (Eobania) vermiculata* Müll., PIERSANTI 669.—*H. pomatia* scalariform, PIERSANTI 671.—*H. pomatia* electrical experiments on, POSTMA 689.—*H. (Helicogona) pomatia*, ROBSON 751.—*H. aspersa, pomatia*, hemocyanin, ROCHE 755.—*H. pomatia* anatomical figs., ROSÉN 762.—*H. pomatia* "unicornis" abnormal figs., M. ROTARIDES 765.—*H. pomatia*, ROTARIDES 766.—*H. pomatia*, SCHMID 793.—*H. aspersa*, TUZET 900.—*H. nemoralis, ericetorum, pomatia* as food of birds etc., VERLAINE 912.—*H. pomatia* experiments, reactions and excretion, G. WOLF 947.

Hispaniolana, subgen. n. of *Polydontes*, type *Helix undulata* Fér., H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 141.

Hojeda micromphala p. 146 text-figs. 1 a, b, c, *H. dominicensis* p. 147 text-figs. 2 a, b, c, Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933.

Hygromia hispida, STUBBS 862.—*H. revelata* habitats and associated species, OLDHAM 617.

Iberus alonensis, AGUILAR-AMAT 10.

Kimboraga gen. n. [non descr.] type *Chloritis micromphala* Gade, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 50, 58.

Le Chatelieria michaelae sp. n. Marocco, PALLARY Bull. Soc. N.H. Alger. 24 7 1933 p. 245.

Levantina hierosolyma sanhedrina var. nov. Palestine, AVNIMELECH Arch. f. Moll. 65 2 1933 p. 54, pl. ix, f. 6.

Lisembryon subgen. n. of *Polydontes*, type *Helix dilatata* Pfr., P. (L.) *pcas-i* sp. n. Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 142 pl. viii f. 3, 3a.

Massylaea bournazeliana, derbesi, bisseyana spp. n. MAROCCO, PALLARY Bull. Soc. N.H. Alger. 24 7 1933 pp. 244, 245.

Mastigophallus rangianus (Fér.). AGUILAR-AMAT 13.

Maurohelix selimani sp. n. MAROCCO, PILLARY Bull. Soc. H.N. Alger. 24 7 1933 p. 246

Meracomelon gen. n. [non descr.] type *Helix rufofasciata* Brazier, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 52, 58.

Meridolum gen. n. [non descr.] type *Helix jervisensis* Quoy & Gaimard, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 47, 58.

Micardista gen. n. type *Helix barneyi* COX, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 47, 58.

Monadenia churchi p. 79 pl. v. f. 1-5, pl. vi f. 8; *M. troglodytes* p. 84 pl. v f. 6-8; spp. n. Northern California, HANNA & SMITH Nautilus 46 3 1933.—*M. fidelis* (Gray) variation, E. P. & E. M. CHACE 148.

Noctepuna subgen. n. type *Helix poiretiana* Reeve including *Papuina nuensis* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 41, 57.

*Obba gallinula barthelowi, listeri sibolonensis, l. camponensis, l. halcona, l. mayabigana, l. smithi, l. caloocana, O. subhorizontalis radcliffei, O. sarcochroa ilogana, subspp. n., O. mesai sp. n., O. m. sablayana, O. planulata salcedoi, p. bongabona, p. paluana, p. mansalayana, p. medioensis, p. mangarina, p. verdensis, p. caguayana subspp. n. Mindoro Philippines, BARTSCH Bull. U.S. Nat. Mus. 100 6 8 1933 pp. 343-371 pls. lxxxviii-xciii.—*Obba papilla, heroica, listeri, marginata; Obba papilla papilla, heroica*-var. *pygmaea*-var., *O. p. konowensis* Boll., *O. planulata* Lk. *subangulata*-var. figs., RENSCH 736.*

Obstengenia gen. n. type *Chloritis inflecta* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 50, 58.

Odontosagda alleni sp. n. Haiti, CLENCH & AGUAYO Pr. New Eng. Zool. Club 13 p. 36.—*Odontosagda suprema* sp. n. Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 144 pl. ix f. 6-9.

Offachloritis gen. n. type *Helix dryanderensis* COX, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 50, 58.

Oreohelix vortex p. 57, f. 1-2, *O. flammulifer* p. 58 f. 3-4, spp. n. Idaho, *O. nevadensis* p. 60 f. 5-6 sp. n. Nevada, S. S. BERRY J. Ent. Zool. Claremont Cal. 24 1932.

Pallidelix gen. n. type *Helix greenhilli* COX, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 47, 58.

Pandofella gen. n. type *Panda whitei* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 39, 57.

Papuxul subgen. n. type *Helix bidwilli* Pfeiffer (em.), IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 41, 57.

Papuina (*Rhytidoconcha*) *inquirenda confirmata* var. n. p. 315, *P. bühleri* sp. n. p. 315, f. 3, Admiralty Is., *P. tabarensis* sp. n. p. 316 f. 4, Island off New Ireland, *P. (Cristallopsis) paravicinii* sp. n. p. 317 f. 5 Malaita, I. RENSCH Zool. Anz. Leipzig 102 1933.

Planispira (*Trachia*) *sumbana* sp. n. Sumba I., B. RENSCH SitzBer. Ges. naturf. Fr. Berlin 1932 8-10 1933 p. 506 f. 8.

Plectorhagada subgen. n. of *Rhagada*, type *Helix plectilis* Benson, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 52, 58.

Pleurodonte aspera Lk. fig., STEEN 844.

Polydonte [vide etiam *Lissembryon*] *dominicensis gabbi* subsp. n. = *Helix dissita* Desh. in part, PILSBRY Man. Conch. 5 p. 71 pl. xvii ff. 46, 47 not of Deshayes, Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 141 pl. viii f. 1.

Polygyra tridentata frisoni var. n. Illinois, F. C. BAKER Nautilus 47 2 1933 p. 58.—*P. trachypepla* p. 12 pl. ii ff. 12, 12a, *hypla* p. 14 pl. ii f. 13, 13a, spp. n.; *loricata nortensis* p. 13 pl. ii f. 14, 14a; *columbiana oria* p. 15 pl. ii f. 11, 11a, subsp. n.; California, S. S. BERRY Nautilus 47 1 1933.—*P. (Triodopsis) sana* sp. n. p. 88, pl. vii f. 4-6; *P. (Stenotrema) turbinella* subsp. n. p. 89 pl. vii f. 1-3; Tennessee, CLENCH & ARCHER Nautilus 46 3 1933.—*P. dorfeuilliana*, F. C. BAKER 64.

Polygyridae Yucatan, BEQUAERT & CLENCH 86.

Posorites gen. n. type *Helix fucata* Pfeiffer, including *conscendeus* Cox, *mayana* Hedley, *turneri* Shireley, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 42, 57.

Pygmipanda gen. n. type *Bulimus atomatus* Gray, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 39, 57.

Rachispeculum gen. n. type *Bulimus bidwilli* Cox [= *Papuina folicola* Hedley], IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 42, 57.

Rhytidoconcha subgen. n. for *Papuina inquirenda* I. Rensch Zool. Anz. 85 p. 49 1929, I. RENSCH Zool. Anz. Leipzig 102 1933 p. 313 figs.

Sagdidæ Yucatan, BEQUAERT & CLENCH 86.

Semotrachia gen. n. [non descr.] type *Thersites basedowi* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 51, 58.

Setobaudinia gen. n. [non descr.] type *Helix collingii* Smith, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 55, 59.

Sinumelon godfreyi nom. n. for *Helix angariana* Pfeiffer, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 52, 58.

Solaropsis johnsoni sp. n. Matto Grosso Brazil, PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 68 pl. ii f. 1 a, b.

Spernachloritis subgen. n. [non descr.] of *Semotrachia* [?] type *Hadra setigera* Tate, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 52, 58.

Spurlingia gen. n. type *Helix nicomede* Brazier, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 47, 58.

Suavitas sericata sp. n. Santo Domingo H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 145 pl. ix f. 13, 13 a, b.

Tachea nemoralis sexual cells, MONNÉ 558.

Taenioraphe sec. n. for *Suavitas* (T.) *leucorapha* (Pfr.), H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 146.

Temporena subgen. n. type *Helix whartoni* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 46, 58.

Tingitana lapierrei sp. n. Morocco, PALLARY Bull. Soc. H.N. Alger. 24 7 1933 p. 246.

Tolgachloritis gen. n. type *Chloriti jacksoni* Hedley, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 50, 58.

Torresitrachia gen. n. [non descr.] type *Helix endeavourensis* Brazier, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 55, 59.

Tricheulota gloriosa sarasinorum nomen. nov. for *T. gl. gl. pars*; *T. fl. iostoma*, *Tricheulota zodiaceus heinrichi* vars. n. Celebes, RENSCH Mitt. zool. Mus. Berlin 19 1933 pp. 111, 112.

Urguessella congenita f. 20, *planata* f. 21 spp. n. Abyssinia, THEELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933 p. 295.

Varohadra gen. n. [non descr.] type *Helix oconnellensis* Cox, *V. o. jacksoni*, *o. caroli* subsp. n. Australia pp. 45, 57; *Varohadra bernhardi* p. 45, *probleema* p. 46, spp. n. *Varohadra curtisiana exedra* p. 45, *incei mattea* p. 46, *volgiola fortasse* p. 46 subsp. n. *volgiola* nom. nov. for *H. andersoni* Cox preoc., IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. as above, and 58.

Ventopelita gen. n. [non descr.] type *Helix leucocheilus* Cox = *mariae* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 55, 59.

Vidumelon gen. n. type *Hadra wattii* Tate, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 51, 58.

Westraltrachia gen. n. type *Trachia froggatti* Ancey, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 55, 59.

Xerophila (*Xerotracha*) *aurebasiana*, *albenizi* spp. n. Morocco, PALLARY Bull. Soc. H.N. Alger 24 ? 1933 p. 248.

ENDODONTIDÆ.

Afrodonta novemlamellaris Bnp., *A. unilamellaris* p. 146 pl. vii f. 2-4 sp. n. Zululand; *intratuberculata* p. 147 pl. vii f. 5-8; *burnupi* p. 148 pl. vii f. 9-11; *acinaces* p. 149 pl. vii f. 12-15 spp. n. Natal, M. CONNOLLY Ann. Natal Mus. 7 2 1933.

Anguispira alternata anatomy figs., D. T. JONES 401.

Delinitesta gen. n. [non descr.] type *Helix gayndahensis* Brazier, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 54, 59.

Dentherona gen. n. [non descr.] type *Helix dispar* Brazier, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 53, 59.

Elsothera gen. n. [non descr.] type
Helix sericatulata Pfeiffer, IREDALE Rec.
Aust. Mus. Sydney 19 1 1933 pp. 53, 59.

Endodonta (*Thaumatodon*) *cookei* sp.
n., COCKERELL 176.

Geminoropa gen. n. [non descr.] type
Helix antialba Beddome, IREDALE Rec.
Aust. Mus. Sydney 19 1 1933 pp. 53, 59.

Goniodiscus rotundatus glands, ADAM
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Laomavix gen. n. [non descr.] type
Helix minima Cox = *colliri* Brazier,
IREDALE Rec. Aust. Mus. Sydney 19 1
1933 pp. 53, 59.

Miselaoma gen. n. [non descr.] type
Helix weldii Tenison-Woods, IREDALE
Rec. Aust. Mus. Sydney 19 1 1933 pp.
53, 58.

Mulatrena gen. n. [non descr.] type
Helix fordei Brazier, IREDALE Rec. Aust.
Mus. Sydney 19 1 1933 pp. 53, 59.

Oreokera gen. n. [non descr.] type
Flammulina cumulus Odhner, IREDALE
Rec. Aust. Mus. Sydney 19 1 1933 pp.
54, 59.

Oreomava gen. n. [non descr.] type
Helix otwayensis Petterd; *O. johnstoni*
nom. n. for *Helix otwayensis* var. *alpina*
Johnston, IREDALE Rec. Aust. Mus.
Sydney 19 1 1933 pp. 54, 59.

Partula paravicinii sp. n. Bismarek
Archipelago, CLENCH *Nautilus* 47 1 1933
p. 24 pl. iii f. 5-6.

Pasmaditta gen. n. [non descr.] type
Helix jungermanniae Petterd, IREDALE
Rec. Aust. Mus. Sydney 19 1 1933 pp.
53, 58.

Pedicamista gen. n. [non descr.] type
Helix caesus Cox, IREDALE Rec. Aust.
Mus. Sydney 19 1 1933 pp. 53, 59.

Pernagera gen. n. [non descr.] type
Helix albanensis Cox, IREDALE Rec.
Aust. Mus. Sydney 19 1 1933 pp. 53, 59.

Philalanka sericea sp. n. Selangor
LATDLAW Bull. Raffles Mus. Singapore
7 1932 p. 41 fig.

Pillomena gen. n. [non descr.] type
Flammulina meraca Cox & Hedley,
IREDALE Rec. Aust. Mus. Sydney 19 1
1933 pp. 54, 58.

Pseudohelionoconcha subgen. n. for
Endodonta (*P.*) *spurca* Sow. *dianae* Pfr.
persoluta Sm. *latissima* Sm., GERMAIN
Comptes rendus du Congre Soc. 1929
(1932).

Pyramidula (*Patulastra*) *grabau* p.
263 f. 1, 2; *P. (Pat.) gracilis* p. 265 f.
3, 4; spp. n. N.W. China, PING & YEN
Bull. Fan Mem. Inst. Biol. 4 6 1933.

Setomedeia gen. n. [nom. nov. for
Suteria] type *Suteria seticostata* Hedley,
IREDALE Rec. Aust. Mus. Sydney 19 1
1933 pp. 53, 58.

Stenacapha gen. n. [non descr.] type
Helix saxesi Petterd, IREDALE Rec.
Aust. Mus. Sydney 19 1 1933 pp. 53, 59.

Theskelomensor gen. n. [non descr.]
type *Helix lizardensis* Pfeiffer, IREDALE
Rec. Aust. Mus. Sydney 19 1 1933 pp.
54, 59.

Thryasona gen. n. [non descr.] type
Helix diemenensis Cox, IREDALE Rec.
Aust. Mus. Sydney 19 1 1933 pp. 54, 59.

Torresiropa gen. n. [non descr.] type
Helix spaldingi Brazier, IREDALE Rec.
Aust. Mus. Sydney 19 1 1933 pp. 54, 59.

Trachycystis wilmattae sp. n. Tshi-
bimda Belgian Congo, PILSBRY &
COCKERELL P.Z.S. (2) 1933 p. 374 pl. i
f. 5.

ORTHALICIDAE, BULIMULIDAE, UROCOPTIDAE.

Angulicervix subgen. n. [of *Brachy-
podella*] type *B. peasei*. H. A. PILSBRY
Proc. Acad. Nat. Sci. Philad. 85 1933 p.
151.

Apoma Beck, SPENCE 840.

Brachypodella utowanae sp. n. Beata
Id. Santo Domingo, CLENCH Proc.
New England Zool. Club 12 p. 104.—
Brachypodella peasei sp. n. Santo
Domingo, H. A. PILSBRY Proc. Acad.
Nat. Sci. Philad. 85 1933.

Bulimulidae Yucatan, BEQUAERT &
CLENCH 86.

Bulimulus pupiforme, *erythrostomus*,
albus figs., GIGOUX 321.—*B. johnsoni*,
slevini, *santacruzensis*, LOWE 512.

Bulimus punctulifer, *coquimbensis*
broderipi figs., GIGOUX 321.—*B. (Buli-
mus) ussuriensis* (Ehrmann), MORI 568.

Cylindrella teres, HAAS 349.

Drymaeus shattucki pl. 68 f. 4, 7 p.
533 (vide Occ. Pp. Boston Soc. N.H. v.
p. 424 1931), BEQUAERT & CLENCH 86.
—*D. bahamensis roseatus* p. 87 pl. i f.
12, 13, *b. greenwayi* p. 88 pl. i f. 11,
subsp. n. Bahamas, W. S. CLENCH Pr.
New Engl. Zool. Cl. 13 1933.

Hartogembryon subgen. n. [non descr.] of *Bothriembryon* type *Bulimus onslowi* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 41, 57.

Iocknostrophina subgen. n. [of *Brachypodella*] type *B. latiaxis*. H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 151.

Larapintembryon subgen. n. [non descr.] of *Bothriembryon* type *Liparus spenceri* Tate, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 41, 57.

Liguus fasciatus solisoccasus subsp. n. Everglades Florida, BOE Nautilus 47 2 1933 p. 68 pl. vi f. 5, 6.—*L. fasciatus walkeri* sp. n. Florida, CLENCH Nautilus 46 3 1933 p. pl. vii f. 7–9; *L. fasciatus castaneozonatus* subsp. n. Florida, PILSBRY Nautilus 46 3 1933 p. pl. vii f. 10.

Oxystyla princeps, STEEN 844.

Satagembryon subgen. n. [non descr.] of *Bothriembryon* type *Buliminus gratwicki* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 41, 57.

Tasmanembryon subgen. n. [non descr.] of *Bothriembryon* type *Bulimus tasmanicus* Pfeiffer, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 41, 57.

Urocoptis (Autocoptis) olssoni p. 148 pl. x f. 6–9, *U. (A.) montecristensis* p. 149 pl. x f. 10, 11, 11a, *U. (A.) per-punctata* p. 149 pl. x f. 1–4, spp. n. Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933.

Urocoptidae Yucatan, BEQUAERT & CLENCH 86.

OLEACINIDAE, STREPTAXIDAE, TESTACELLIDAE, RHYTIDIDAE.

Afristreptaxis aethiopicus p. 287 fig. 2, 2a; *A. abessinicus* p. 288 f. 3 Abyssinia, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933.

Cupedora gen. n. [non descr.] type *Helix lincolniensis* Pfeiffer, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 48, 58.

Echotruda gen. n. [non descr.] type *Helix strangeoides* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 48, 58.

Glandina, JAECKEL 393.

†*Glandina* n. sp. fig., RAVN 723.

Gulella (Costigulella) microtaenia sp. n. Tshibinda Belgian Congo, PILSBRY & COCKERELL P.Z.S. (2) 1933 p. 372 pl. ii f. 8, 8a.—*G. aethiopica* f. 8, *G. abessinica* f. 9, spp. n. Abyssinia p. 289; *G. irritans* f. 58 p. 315, *biparietalis* f. 59 p. 315; *togoensis* f. 60 p. 316; *G. (Avakubia) acuminata* f. 61 p. 316 Africa, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933.—*G. adamsiana* Pfr. abnormal, E. WARREN 924.

Murphitella gen. n. [non descr.] type *Helix franklandiensis* Forbes, *M. froggatti* sp. n., IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 49, 58.

Namoiitena subgen. n. of *Rhytida* type *Helix namoiensis* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 49, 58.

Occirhenea gen. n. type *Helix georgiana* Quoy & Gaimard, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 48, 58.

Oleacina peasei p. 153 pl. ii f. 1–3, *O. columbi* p. 154 pl. ii f. 4, 5, spp. n., *O. pethionis stigmatoraphe* p. 155 pl. i f. 6–8a subsp. n. Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933.

Oleacinidae Yucatan, BEQUAERT & CLENCH 86.

Ptychotrema (Wilmattina) cymatonotus (Pils.) [= *Gulella disseminata* c.] p. ii f. 4a, b., PILSBRY & COCKERELL 680.—*Ptychotrema (Ennea) kasuloi* pl. ii f. 2, 2a, *P. (Parennea) scintilla* pl. ii f. 7, 7a, spp. n.; *P. (P.) nyangweense tshibindanum* pl. ii, f. 5, 5a, subsp. n. all from Tshibinda Belgian Congo, PILSBRY & COCKERELL P.Z.S. (2) 1933 p. 369.—*P. tumidulum* sp. n. Africa, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933 p. 317 f. 62.—*P. gratum* fig. 4; *P. (Ennea) laeve* f. 5; *P. (E.) hyalinum* f. 6; spp. n. p. 288; *P. (E.) massauense* sp. n. p. 289 f. 7 Abyssinia, THIELE SitzBer. Ger. naturf. Fr. Berl. Dec. 1933.

Rhytida spelaea sp. n. Kidnapper New Zealand, POWELL Proc. Malac. Soc. 20 4 1933 p. 192 fig. 1–3.

Saladelos gen. n. [non descr.] type *Helix splendidula* Pfeiffer, *S. commixta* nom. n. for *Helix splendidula* Pfeiffer, *S. c. lacertina c. bensa* subspp. n., IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 48–58.

Spiraxis (Volutaxis) striatipes sp. n. Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 160 pl. ix f. 14.—*Spiraxis (Volutaxis) maya* pl. lxviii f. 1–2 (vide Occ. Pap. Boston Soc. N.H. V. p. 423, 1931) Yucatan, BEQUAERT & CLENCH 86.

Strangesta gen. n. [non descr.] type *Helix leichardti* Cox, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 48, 58.

Streptostylops gen. n. p. 155 [of Oleacinidae] with type *S. mira* sp. n. p. 156 p. ii. f. 9, 9a, Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933.

Tasmaphena gen. n. [non descr.] type *Helix sinclairi* Pfeiffer, IREDALE Rec. Aust. Mus. Sydney 19 1 1933 pp. 48, 58.

Tayloria grandis sp. n. East Africa p. 314 f. 56; *T. jucunda* sp. n. Abyssinia, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933 p. 286 figs. 1, 1a.

Varicella [vide etiam *Varicellidea*] *paradisensis* sp. n. p. 156 pl. ii f. 11, *V. impressa subimpressa* subsp. n. p. 157 pl. ii f. 12, *V. distans* sp. n. pl. 157 pl. ii f. 10b, 14, 14a, *V. distans angustior* subsp. n. p. 158 pl. ii f. 10a, 13, *V. samana* sp. n. p. 158 pl. ii f. 10c, 15, *V. casula* sp. n. p. 158 pl. ii f. 10d, 16, 16a, *V. burringtonbakeri* p. 160 pl. x f. 18, 18a sp. n., Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933.

Varicellidea subgen. Pilsbry *Varicellidea* Pils. Man. Conch. Vol. 19 p. 49 June 26 1907 (not p. 86), *Varicellopsis* Pils. ibid. p. 85 Aug. 31, 1907 (not p. 49), *Varicella (Varicellidea) clathrata* sp. n. p. 159 pl. x f. 16, 17, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933.

Wilmattina subgen. n. of *Ptychotrema* [Streptaxidae] with type *P. (Wilmattina) wilmattae* sp. n. Tshibinda Belgian Congo, PILSBRY & COCKERELL P.Z.S. (a) 1933 p. 370 pl. ii f. 1, 1a.

PUPILLIDAE, ENIDAE, CLAUSILIDAE, CERIONIDAE, ACHATINIDAE, STENOGRYDAE, HELICTERIDAE.

†*Acanthinula lamellata*, STEUSLOFF 852.

Achatina “[Burtoa]” *hudiensis* sp. n. Tertiary Sudan, Cox Bull. Inst. égypt. 15 2 1933 p. 339.—*A. fulica* chemical specifics against, CORBETT

198.—*A. (Cochlitoma) graueri* Thiele fig., PILSBRY & COCKERELL 680.

†*Achatina lactea* figs., NARDINI 588.

Adzharia gen. n. (Enidae, Chondrulinae) type *A. renschi* sp. n. Chula Adzharien, P. HESSE Arch. f. Naturg. Leipzig (N.F.) 2 1933 p. 158 figs.

Alopia straminicollis transsylvanica subsp. n.; *A. mixa* sp. n.; *A. m. velicana* subsp. n.; *A. alpina* sp. n.; *A. a. beata* subsp. n. Roumania, KIMAKOWICZ Arch. f. Moll. 65 1 1933 pp. 2–7 pl. 1.—*A. alpina, romania*, spp. n. *A. straminicollis arcana*, *A. romania straminicervix* subsp. n. Roumania, KIMAKOWICZ Arch. f. Moll. 65 3 pp. 121–124 pl. xiii.—*A. fussi charpentieri*, *A. f. venusta*, *A. f. gratiosa*, *A. straminicollis reginae*, *A. f. kimakowiczi* subsp. n. Roumania, KIMAKOWICZ Arch. f. Molluskenk. 65 4–5 1933 pp. 194–196.—*Alopia*, KIMAKOWICZ 421.

Amastrea (Cyclamastrea) cyclostoma gregoryi subsp. n. p. 5 pl. i f. 1, *A. (C.) delicata* p. 7 pl. i f. 2, *A. (C.) globosa* p. 7 pl. i f. 3 spp. n., *A. (C.) thurstoni bembicodes* p. 8 pl. i f. 4 subsp. n., *A. (C.) problematica* p. 9 pl. i f. 5 sp. n., *A. (Amastrella) rugulosa jameae* p. 12 pl. i f. 6 subsp. n., *A. anthonii meineckeri* p. 14 pl. i f. 7, 11–15 subsp. n.; *A. a. subglobosa* p. 16 pl. i f. 16, *A. (Amastrella) ovatula* p. 17 pl. ii f. 5–7 spp. n.; *A. (Metamastrea) gulickiana dichroma* p. 19 pl. ii f. 8, *A. (M.) subrostrata acuminata* p. 21 pl. ii f. 10, subsp. n.; *A. (M.) oswaldi* p. 22 pl. ii f. 13, *A. inopinata* p. 23 pl. ii f. 11–12, *A. (Heteramastrea) dwightii* p. 24 pl. ii f. 14, *A. (H.) implicata* p. 25 pl. ii f. 15, *A. (H.) nanodes* p. 26 pl. ii f. 16, spp. n. Sandwich Ids., COOKE Occ. Pap. Bishop Mus. Honolulu 10 6 1933.

Aneitea (Triboniophorus) graeffei paupensis var. n. Dutch North New Guinea, T. v. B. JUTTING Nova Guinea Leide 17 1 1933 p. 90 f. 19 radula.

†*Anthracopupa rothenburgensis* sp. n. Carboniferous Europe, HINTZE Cbl. Min. Geol. Paläont. Stuttgart 4 1933 p. 242.

Archachatina gaboonensis, spectaculum, spp. n. *A. g. lambarenensis* var. n. West Africa, PILSBRY Proc. U.S. Nat. Mus. 82 19 1933 pp. 1, 2 pls. i, ii.—*A. neumanni* sp. n. Abyssinia, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933 p. 296 f. 22, 22a.

Atea subgen. n. of *Lamellidea* (Tornatellinidae) type *L. adamsoni* sp. n. napou; *L. mumfordi*, Hivaoa; *wahukana* Uahuka, spp. n., PILSBRY & COOKE Nautilus 47 2 1933 p. 62. ["To be figd. in a suppl. to Mon. on Tornatellinidae" Man. Conch.]

Bocageia (*Liobocageia*) *bukaensi* f. 43, 43a, *aethiopica* f. 44, 44a, spp. n. Abyssinia, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933.

Buliminus anocamptus diminutus var. n. N.W. China, PING & YEN Bull. Fan. Mem. Inst. Biol. 4 6 1933 p. 275 f. 13.

†*Caecilianaella acicula* fig. p. 45, WERVEKE 934.

Ceras zenkeri p. 320 f. 73, 73a, *matumbianum* p. 321 f. 74, 74a, spp. n. Africa, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933.

Cerastus plicatus f. 46, 46a, *regalis* f. 47, spp. n. p. 309, *inflatus* f. 48, *albidus* f. 49, *kellaensis* f. 50, spp. n. p. 310, *corneus* f. 51, *stilifer* f. 52, *elatus* f. 53, spp. n. p. 311, *altus* f. 55 sp. n. p. 312, Abyssinia, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933.

Cerion (*Strophiope*) *platei* sp. n. p. 90 pl. i f. 7, 8; *C. (S.) martensi cliffordi* sp. n. p. 91 pl. i f. 10; *C. (S.) utowana* p. 92 pl. i f. 1, 2; *C. (S.) mariguanense* p. 94 pl. i f. 3; *C. (S.) barbouri* p. 95 pl. i f. 5; *C. (S.) armouri* p. 96 pl. i f. 4; *C. (S.) fairchildi* p. 97 pl. i f. 6; *C. (Diacerion) inaguense* p. 98 pl. i f. 9 spp. n. Bahamas, W. S. CLENCH Pr. New Engl. Zool. Cl. 13 1933.—*Cerion urvi*, *glans*, JAENTICKE 394.

Chondrina arenacea, KÜHNELT 448a.

Chondrula kervillei sp. n. Asia Minor, GERMAIN Bull. Mus. Hist. nat. Paris (2) 5 5 1933 p. 391.

Clausilia stentzi letochana, *tiesenhauseni balsamoi*, THORSON 890.

†*Clausilia dubia* figs., TESCH 885.

Clausiliidae of Maltese Islands, Soós 827.

Cochlicopa youngi sp. n. N.W. China, PING & YEN Bull. Fan. Mem. Inst. Biol. 4 6 1933 p. 285 f. 20.—*Cochlicopa lubrica*, NILSSON 594.

†*Cochlicopa lubrica* fig. p. 45, WERVEKE 934.—Figs., TESCH 885.

Cochlicopidae, FELIKSIÁK 278.

Columella pygmaeorum sp. n. Tshibinda Belgian Congo, PILSBRY & COCKERELL P.Z.S. (2) 1933 p. 374 pl. ii f. 3.

†*Columella columella*: figs., TESCH 885.

Conulinus cockerelli sp. n. Natal, PILSBRY Nautilus 46 3 1933 p. 101 pl. vi f. 7.

Curvella bathyraphe sp. n. Tshibinda Belgian Congo, PILSBRY & COCKERELL P.Z.S. (2) 1933 p. 368 pl. ii f. 12.—*Curvella aethiopica* sp. n. Abyssinia, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933 p. 308 f. 45.

Dictyoglessula, THIELE.

Enidae Anatomy and Systematic, P. HESSE 371.

Ferussiniinae, WENZ 930.

Helenopachnodus gen. n. of Enidae, for *Helix helena* Quog & Gaimard 1833; *Bulimus blofeldi* Forbes 1852, GERMAIN Comptes rend. Congres Soc. en 1929 (1932).

Homorus laevis f. 28, *conformis* f. 29 29a; *dalbaensis* f. 30, 30a spp. n. p. 302; *H. kaffaensis* f. 31, 31a, *djimmaensis* f. 32, 32a, *nitens* f. 33, spp. n. p. 303, *H. maurus* f. 34, *fragilis* f. 35, 35a, *cerinus* f. 36, 36a, spp. n. p. 304, *H. discretus* p. 305, f. 37, *H. (Nothapalus) cylindricus* f. 38, 38a, *H. (N.) spretus* f. 39, 39a spp. n. p. 305, *H. (N.) similis* f. 40, 40a, *H. (N.) perspicuus* f. 41, 41a, *H. (N.) densistriatus* f. 42, 42a, *H. (Itiopiana) abessinicus* f. 426, spp. n. p. 306 Abyssinia, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933.

Ischnoglessula, THIELE.

Jaminia tridens, MAZEK-FIALLA 534.

Lampedusa (Imitatrix) gattoi sp. n. I. of Filfla, Soos Arch. Nat. Leipzig (N.F.) 2 1933 p. 321 figs.

Leptinaria gracillima sp. n. Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 153 pl. ix f. 16.

Limicolaria elegans tapetis subsp. n. Tshibinda S. Africa, PILSBRY & COCKERELL P.Z.S. (2) 1933 p. 367 pl. i f. 2, 3.—*L. charbonnieri* Bgt., *rectistrigata* E. A. Smith, *martensiana* E. A. Smith, PILSBRY & COCKERELL 680.—

L. obtusa p. 297 f. 24; *amoena* p. 299 f. 25, *commoda* p. 300 f. 26 spp. n. Abyssinia, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933.

Napaëinus sect. n. (Enidae, Eninae) type *Bul moquinianus* W.B., P. HESSE Arch. f. Naturg. Leipzig (N.F.) 2 1933 p. 208.

Obeliscus dunkeri moderatus subsp. n. Santo Domingo, H. A. PILSBRY Proc. Acad. Nat. Sci. Philad. 85 1933 p. 152.

Opeas sinensis p. 281 f. 17, *O. aksuensis* p. 282 f. 18 spp. n. N.W. China, PING & YEN Bull. Fan. Mem. Inst. Biol. 4 6 1933.

Oxychilus (Morlina) depressum Sterki, BOETTGER 113.

Paramastus sect. n. (Enidae, Eninae) type *Bul episomus* Bgt., P. HESSE Arch. f. Naturg. (N.F.) 2 1933 p. 181 fig.

Phaedusa (Caspiophaedusa) hyrcanica ex Morgan mss. sp. n. Asia Minor, GERMAIN Bull. Mus. Hist. nat. Paris (2) 5 5 1933 p. 390.

Pityl Moersch referred to Tornatellinidae, PILSBRY & COOKE 681.

Planamastra spaldingi koolauensis sp. & subsp. n. Oahu, COOKE Occ. Pap. Bishop Mus. Honolulu 10 6 1933 pp. 3, 4 pl. ii f. 1, 2; 3, 4.

Pseudochondrula gen. n. (Enidae, Jamininae) type *Bul florenskii* Rosen, P. HESSE Arch. f. Naturg. (N.F.) 2 1933 p. 167 figs.

Pseudotrochus turbinatus Lea, *P. leai*, *coffeamontis* spp. n. *P. auripigmentum muscarum* subsp. n. West Africa, PILSBRY Proc. U.S. Nat. Mus. 82 19 1933 pp. 4-6 pls. 1, 2.

†*Pupa [Pupilla] muscorum* fig. p. 45, WERVEKE 934.

†*Pupilla muscorum* figs., TESCH 885.

Pupillidae Yucatan, BEQUAERT & CLENCH 86.

Rachisellus [Rachis] punctatus monograph on anatomy, SESHAYIA 807.

Serrulina senghanensis ex Morgan ms. Asia Minor, GERMAIN Bull. Mus. Hist. nat. Paris (2) 5 5 1933 p. 391.

Subulina octona as carrier of *Cronartium*, GRAVATT & MARSHALL 330.

Subulinidae Yucatan, BEQUAERT & CLENCH 86.—Selangor, LAIDLAW 475.

Subuliniscus cacuminatus sp. n. Tshibinda Belgian Congo, PILSBRY & COCKERELL P.Z.S. (2) 1933 p. 367 pl. ii f. 9, 10.

Subulona camerunensis p. 318 f. 66, 66a; *hintzi* p. 318 f. 67, 67a; *claviformis* p. 318 ff. 68, 68a; *ucamica* p. 319 f. 70; *togoensis* p. 319 f. 71, 71a; *S. (Oreohomorus) banjoensis* p. 320 f. 72, 72a spp. n. Africa, THIELE SitzBer. Ges. naturf. Fr. Berl. Dec. 1933.

Truncatellina pseudocylindrica sp. n. N.W. China, PING & YEN Bull. Fan. Mem. Inst. Biol. 4 6 1933 p. 278 f. 15.

†*Vallonia tenuilabris* figs., TESCH 885.

Valloniidae, FELIKSIK 278.

Vertiginidae, FELIKSIK 278.

Vertigo teilhardi sp. n. N.W. China, PING & YEN Bull. Fan. Mem. Inst. Biol. 4 6 1933 p. 277 f. 14.—*V. angustior* Jeffr., KEVAN 417.—*V. lilljeborgi* (West.), KEVAN & WATERSTON 418.—*V. moulinsiana*, KEVAN 419.—*V. antivertigo*, pusilla, A. H. SMITH 825.

†*Vertigo parcedentata*, *antivertigo* figs., TESCH 885.

SUCCINEIDAE.

Pseudosuccinea columella as host of *Fasciola hepatica*; *P. columella* intermediate host of *Fascioloides magna*; *P. columella* effects of Cu, KRULL 445, 447.

Succinea utowana sp. n. Watling Is. Bahamas, W. J. CLENCH Pr. New Engl. Zool. Cl. 13 1933 p. 85 pl. i f. 18, 19.—*S. sanibelensis* sp. n. Florida, REHDER Nautilus 47 1 1933 p. 20 pl. iii f. 4.—*S. pellucida* sp. n. N.W. China, PING & YEN Bull. Fan. Mem. Inst. Biol. 4 6 1933 p. 290 f. 23.—*S. archeyi* sp. n. Doubtless Bay, New Zealand, POWELL Proc. Malac. Soc. 20 4 1933 p. 192 figs. 4, 5.—*S. putris*, glands, ADAM 4.—*S. exarata*, GERMAIN 318.—*L. elegans*, *pfeifferi*, *arenaria*, *putris*, *oblonga*, Anatomy of, QUICK 715.

†*Succinea oblonga* figs., TESCH 885.—*S. oblonga*, *pfeifferi* figs. p. 45, WERVEKE 934.

Succineidae, FELIKSIK 278.

Scaphopoda.

†*Antale dentale alternans* (Berti in sched.) var. n. Tertiary Italy, SANGIORGI *Giornale di Geol. Bologna* (2) 1 1926 p. 119 pl. vii (i) f. 31.

†*Adulus conradi* sp. n. Miocene New Jersey, PILSBRY & HARBISON *Proc. Acad. Nat. Sci. Philad.* 85 1933 p. 117 pl. iv ff. 18, 19.—*C. laevis* Brazier 1877 not *D. laevis* Schlotheim, COTTON & GODFREY 205.

Dentalium [sic] *laevi*, STEPHANOFF p. 231 846.

Dentaliidae S. Australia, COTTON & GODFREY 205.

Dentalium nivosum p. 7 pl. i f. 9–11 text-figs. 1, 2; *habutae* p. 8 pl. i f. 12, 13 text-figs. 3, 4; *D. (Laevidentalium) toyamaense* p. 11 pl. i f. 5, 6; spp. n. *D. (Episiphon) (subrectum* var. ?) *makiyamai* sp. et var. nov. 11 pl. i f. 8, Toyama Bay, KURODA & KIBUCHI *Venus* 4 1 1933.—*D. (Antalis) marukawai* sp. n. Southern Japan, OTUKA *Venus* 4 3 1933 p. 159 text-figs. a–f.

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†*Schizodus gapeevi* p. 49, 176 pl. iv f. 10-14, *S. jakovlevi* pp. 51, ill. pls. iv f. 15-17, v f. 1-3; *S. lutugini* pp. 52, 179 pl. v f. 4-6 spp. n. Carboniferous, FEDOTOV Trans. Geol. Prospect Servia U.S.S.R. Ges. 103 1932.—*S. occidentalis* sp. n. Permo-Carboniferous Brazil, F. R. C. REED Monog. serv. geol. e min. Brasil 10 1930 pp. 38, 39 pl. vii f. 3, 3a.—*S. trigonalis* n. sp. [nom. nud.], SAYRE 780.—*S. fig.*, H. F. F. BOLD 295.

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†*Aristoceramus boekmi rugiae* "var. n." Cretaceous Madagascar, HEINZ Z. deuts. geol. Ges. Berlin 85 4 1933 p. 258.

†*Aucella* fig., H. F. F. BOLD 296.

†*Avicula macroptera*, KLINGHARDT 427.—*A. dalimieri, lamellosa* figs., WILSCHOWITZ 938.

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†*Daonella taramellii* Mojs. fig., DESIO 240.

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Inoceramus schmidtii, SHIMIZU 815.

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Lithophaga, AMEMIYA & OHSIMA 22; KURODA 461.

†*Lithophaga subelliptica* n. sp. [nom. nud.], SAYRE 780.

†*Modiola intermedia bononiensis* var. n. Tertiary Italy, LIPPARINI Bol. Soc. Geol. ital. 52 1 1933 p. 3 pl. i f. 5.—*M. laticostata* White figs., A. B. REAGAN 725.

Modiola plicatula, W. KÜHNELT 449.

Modiolaria nigra fig., W. KÜHNELT 449.

Modiolus philippinarum, *metcalfei* figs., TALAVERA & FAUSTINO 879.

†*Modiolus ynezianus lagunanus* var. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 206 pl. xxxiv f. 2.—*M. abbreviatus* sp. n. Jurassic Alberta, WARREN Tr. R. S. Can. 3 26 iv 1932 p. 22 pl. i.—*M. martini* Schepman f. 6 a, b, OOSTINGH 620.

Musculus, KURODA 460.

†*Myalina ? slocomi* n. sp. [nom. nud.], SAYRE 780.—*M. curvata* fig., WILSCHOWITZ 938.

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†*Oxytoma inaequalis hennigi* var. n. Cretaceous Africa, DIETRICH Palaeontograph. Stuttgart Suppl. vii 2 1 1933 p. 58 pl. vii f. 99-101.—*Oxytoma* fig., H. FREBOLD 296.

†*Perna* fig., H. FREBOLD 296.—*P. ephippium*, *obliqua*, *isognomum*, *avicularis*, *femoralis*, *canina*, *marsupium*, *sulcata*, *vulsella*, *nucleus*, *legumen*, *maxillata*, *mytiloides*, LAMY 479.

†*Pseudomonotis gapeevi* pp. 101, 187 pls. xi f. 13-16, xii f. 1; *P. jakovlevi* pp. 102, 188 pl. xii f. 2; *P. kumpani* pp. 103, 189 pl. xii f. 3-18; *P. stepanovi* pp. 106, 191 pl. xii f. 19; *P. mutabilis* pp. 107, 192 pl. xiii f. 1-9, sp. n. Carboniferous, FEDOTOV Trans. geol. Prospect Service U.S.S.R. fas. 103 1932.—*P. maltonensis* sp. n., ARKELL British Corallian Lamell. Monog. Pal. Soc. 5 1933 p. 199 pl. xxiv f. 13.—*P. sparsicostata* sp. n. E. Greenland, H. FREBOLD Medd. Grønland 84 7 1933 p. 29 pl. iii f. 20-22.—*P. spinosa* n. sp. [nom. nud.], SAYRE 780.—*P. ochotica*, YABE & SHIMIZU 951.—*P. (Claraia) tridentina*, M. YOSSII & OTHERS 954.

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†*Pterinea laevispraecursor* fig., WILSCHOWITZ 938.

†*Pterinella petersi* fig., BONČEV 119.
Solamen, KURODA 461.

†*Striatoceramus hoepeni* "gen. n." [vide p. 256] sp. n. Cretaceous Madagascar, HEINZ Z. deuts. geol. Ges. Berlin 85 4 1933 p. 246 pl. xiii f. 2, 3.

Trichomusculus, KURODA 460.

†*Volviceramus epigonus* "sp. n." Cretaceous Madagascar, HEINZ Z. deutsch.-geol. Ges. Berlin 85 4 1933 p. 254 (1932 xiv p. 21).

†*Vulsella dutra* fig., GOČEV 325.

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†*Amussium denudatum oblonga* var. n. Miocene Italy, BONI Bol. Soc. Geol. ital. 52 1 1933 p. 109 fig.

†*Aviculopecten* (*Dellopecten*) *catharinæ* pp. 10, 11 pls. i f. 1, 6, ii f. 2, 4, iii f. 2, 3, iv f. 3 ?, vi f. 2, 3, *relegatus* pp. 16, 17 pls. ii f. 1, 1a, 5, v f. 1, vi f. 3, 5, i f. 7 ?, iv f. 4 ?, *unicus* pp. 20, 21 pl. iii f. 1, 1a, *misellus* pp. 22, 23 pl. vi f. 1, ? *crassicostatus* pp. 24, 25 pl. v f. 2, spp. n. Permo-Carboniferous Brazil, F. R. C. REED Monog. serv. geol. e min. Brasil 10 1930.

†*Bouleigmus* [*Vulsellidae*] *douvillei* gen. & sp. n. [sole sp.] Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3-4 1933 p. 23 pl. iv f. 11a, b.

†*Camptonectes albertensis*, *subbellistriatus* spp. n. Jurassic Alberta, WARREN Tr. R. S. Can. 3 26 iv 1932 p. 19 pl. iii.

Carpenteria [= *Terquemia*], T. W. VAUGHAN 908.

Chlamys (*Proteopecten*) *glabra* L. *torquata*, g. *peplum-sinense* vars. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. ix.—*C. kiwaensis* sp. n. 400 miles W. of New Plymouth 600-700 fms., POWELL Tr. Pr. N.Z. Inst. 63 3 1933 p. 371 pl. xl f. 1-5.

†*Chlamys* (*Syncyclonema*?) *hennigi* sp. n. Cretaceous Denmark, RAVN K. danske Vid. Selsk. Skr. (9) 5 2 1933 p. 22 pl. i f. 7, 8.—*C. (Pseudamussium) corneola* (Wood), RAVN 723.—*Chlamys*, GOČEV 325.—*C. tchihatcheffi*, *subopercularis*, *parisiensis*, p. var. *optata*, *infumata*, *breviaurita*, figs., GOČEV 325.—*C. (Camptonectes) vincenti* sp. n. Bruxelles Belgium, GLIBERT Mém. Mus. Roy. Hist. nat. Belg. 53 1933 p. 134 pl. viii f. 2.—*C. penolae* p. 112 pl. viii f. 8; *vinassai* p. 114 pl. viii f. 5-6; *elongatoscabrella* p. 122 pl. vi f. 7; *inaequiscabrella* p. 123 pl. vi f. 3-5; *obliquescabrella* p. 125 pl. vii f. 2, 3; *spinoscabrella* p. 126 pl. vii f. 4a, b; *arsazensis* p. 127 pl. viii f. 3, spp. n.; *C. penolae*

altecostata var. n. p. 113 pl. viii f. 7, Miocene Italy, BONI Bol. Soc. geol. ital. 52 1 1933.

†*Dellopecten subquiquelineatus compactus*, HOSKING 358.

†*Entolium parviaure* sp. n. Jurassic Alberta, WARREN Tr. R. S. Can. 3 26 iv 1932 p. 20 pl. i.

†*Heligmia jacobii* sp. n. Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3-4 1933 p. 22 (110) pl. iv f. 9.

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†*Spondylus rostratus* sp. n. Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3-4 1933 p. 20 (108) pl. iv f. 1-5.—*S. douvillei* sp. n. Cretaceous Madagascar, É. BASSE Monog. Paléont. Cretace Mad. 1931 p. 47 pl. ix f. 1-4.—*S. radula*, *varispinus* figs., GOČEV 325.—*S. dutempleanus*?, *latus*?, HARTLEY 359.—*S. striatus*, PARONA 648.

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Sphaeriidae Yucatan, BEQUAERT & CLENCH 86.

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†*Sphaerium mclearni* fig. 1, *livingstonensis* f. 2 spp. n. S. Mary River formation, Alberta, RUSSELL Canad. Field Nat. 46 4 1932 pp. 80, 81.—*S. scaldianum*, *rivicola* figs. p. 45, WERVEKE 934.

Sphaerumbonella brunelli gen. et sp. n. (Erycinidae) Massaua, G. COEN Boll. Pesca Piscicoltura Idrobiol. Roma 9 1933 p. 206 figs.

†*Subachia janenschii* sp. n. Cretaceous Africa, DIETRICH Palaeontograph. Stuttgart Suppl. vii 2 1 1933 p. 43 pls. iv f. 57, 63, 64; v 67, 73.

†*Tancredia canadensis* sp. n. Jurassic Alberta, WARREN Tr. R. S. Can. 3 26 iv 1932 p. 29 pl. iv.—*Tancredia* fig., H. FREBOLD 296.

†*Taras millepustulata* sp. n. Pleistocene Formosa, NOMURA Sci. Rep. Tôhoku Univ. 16 1 1933 p. 75 pl. iii f. 16.

Unio (Elliptio) sanctorumjohanium sp. n. Florida, WRIGHT Nautilus 47 1 1933 p. 17 pl. i.—*U. crassus cytherea*, GELEI 314.—*Unio*, F. HAAS 350.—*U. crassus* Retz m. ater Nilss. and its use in industry, OVCINNIKOV 634.—*U. japonensis* and abnormalities figs., POPENHOE & FINDLAY 688.

†*Unio lunae* [sp. n.] Pontienne Roumanian, VOITEȘTI Rev. Muz. Geol. Min. Univ. Cluj 2 1 1927 p. 26 pl. iv f. 4a, b.—*U. biornatus* sp. n. Cretaceous Alberta, L. S. RUSSELL Tr. R. S. Can. 3 26 iv 1932 p. 37 pl. i.—*U. šuškalovići*, *petkovići*, *scupiensis*, *vodnoensis*, *cvijici*, *pazi*, *grippi*, *acuticarinatus*, *odorovići*, *karići*, *jovanovići*, *lukovići*, *bouéi*, *viqesnehi*, *burgersteini*, *žugavići*, *subatavoides*, *boškovići*, *radovanovići* spp. n. *bouéi borici* var. n. Serbia, PAVLOVIC Bull. Soc. Sci. Skopje 9 1931 pp. 7-16 pls. i-ix.

Unionidae Yucatan, BEQUAERT & CLENCH 86.—Unionidae, ENTZ 264; FILIKSIK 278.—Pedal protractor muscle scars, MARSHALL 526.—Unionidae N. American experiments on the heart, MOTLEY 573.—Unionidae Oka, VLASTOR 914.

Venericardia reinga sp. n. New Zealand, POWELL Proc. Malac. Soc. 20 4 1933 p. 202 pl. xvii f. 1, 2, 5.—*V. parva* and abnormals figs., POPENHOE & FINLAY 688.

†*Venericardia maris australis* sp. n. Cretaceous Brazil, MAURY Monog. serv. geol. e min. Brasil 8 1930 p. 219 pl. viii f. 9.—*V. sakuraii* sp. n. Kurile Ids., NOMURA Jap. J. Geol. Geog. Tokyo 11 1-2 1933 p. 5 pl. i f. 5, 5a.—*V. crenulicostata* p. 69 pl. ii f. 12-16a, b, *V. granulicostata* p. 70 pl. ii f. 7a-d spp. n. Pliocene Formosa, NOMURA Sci. Rep. Tôhoku Univ. 16 1 1933.—*V. eoa* sp. n. *flabellum kingi* var. n. Eocene Texas, F. B. PLUMMER Bull. Univ. Texas 3232 July 1933 pp. 811, 812 pl. viii.—*V. sokolowi* p. 4 pl. i f. 1-13; *V. divergens enitesta* p. 6 pl. i f. 14-23; *V. tumida dujeptovensis* p. 20 pl. iii f. 8-14 sp. et vars. n. Eocene Mandrykovka, SLODKOVICH Trans. Geol. Prosp. Serv. U.S.S.R. 258 1933.—*V. cipangoana*, HAYASAKA 361.—*V. bulla wilcoxensis smithii, texalana, natchitoches, rotunda, flabellum* figs. Eocene Texas, F. B. PLUMMER 685.

TELLINACEA.

Angulus (Peronidia) artus f. 11, 12, 13; *A. (P.) tumens* spp. n. Tertiary N.Z., C. R. LAWS Trans. Proc. N.Z. Inst. 63 3 1933 p. 318.

†*Cardilia krawangensis* p. 20 f. 1a, b; *C. ludwigi* p. 21 f. 2a, b spp. n. Neogene Java, OOSTINGH Ingenieur in Nederlandsch Indie 1 1923 iv.

Donax radians fig., TALAVERA & FAUSTINO 879.

†*Finlayella sinuaria* gen. et sp. n. Tertiary N.Z., Finlayella, has asymmetrical development of the pallial sinus "seen in no other Tellinids," 3 pairs valves, 5 valves, this feature found to be quite constant for each set, genus includes this sp. and *F. imbellica* Marwick, C. R. LAWS Trans. Proc. N.Z. Inst. 63 3 1933 p. 319.

Hemidonax donaciforme fig., TALAVERA & FAUSTINO 879.

Macoma pellucida figs., TALAVERA & FAUSTINO 879.

†*Macoma hakushatonensis* sp. n. Pliocene Formosa, NOMURA Sci. Rep. Tôhoku Univ. 16 1 1933 p. 103 pl. i f. 6a, b.—*M. sespeensis* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 228 pl. xliii f. 10-12e.

†*Macra insulaemaris* sp. n. Miocene New Jersey, PILSBRY & HARBISON Proc. Acad. Nat. Sci. Philad. 85 1933 p. 118 pl. iv f. 26.

Metis [= *Apolymetis*] *kehreri* sp. n. Neogene Java, OOSTINGH Ingenieur in Nederlandsch Indie 1 1934 iv p. 20 f. 4-6.

†*Mulinia* (= *Pseudocardium*?) *panzana* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 232 pl. xlv f. 8, 9.

†*Oncophora dubiosa* Miocene Poland pl. x, FRIEDBERG 299, 300.

†*Semele johnsoniana* sp. n. Miocene New Jersey, PILSBRY & HARBISON Proc. Acad. Nat. Sci. Philad. 85 1933 p. 118 pl. v f. 4-6.

Tellina (Macaliopsis) bruxellensis sp. n. Belgium, GLIBERT Mém. Mus. Roy. Hist. nat. Belg. 53 1933 p. 184 pl. xi f. 11.—*T. kuntsuipinensis* sp. n. Formosa, NOMURA Sci. Rep. Tôhoku Univ. 16 1 1933 p. 99 pl. iv f. 10a, b.

Tellina tenuis, fabula, H. B. MOORE 561.

Tellina rugosa Born [= *palatam* (Martyn) Iredale]—(*Arcop.*) *remies* L., OOSTINGH 618.

†*Tellina boschi* sp. n. Pliocene Java, OOSTINGH Mijningénieur 12 Dec. 1933 p. 215 f. 7a, b.—*T. desertica* sp. n. Bartonian Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 24 pl. ii f. 30.—*T. grimesi* Noetl. var. *elongata* var. n. Neogene Sumatra, HAASTRA & SPIKER 35 10 1932 p. 1323 figs. 36, 37.—*T. prototenulirata* sp. n. Pliocene Formosa, NOMURA Sci. Rep. Tôhoku Univ. 16 1 1933 p. 100 pl. iv f. 7, 8, 9 (a, b).—*T. (Tellina) rosa-indica* f. 11; *T. (Moerella) bantamensis* f. 12, 13 spp. n. Pliocene Java, OOSTINGH Mijningénieur 11 Nov. 1933 pp. 196-197.

Schizothaerus nuttallii experiments re effect of hunger, PATTERSON 651.

VENERACEA.

†*Antigona carrizoensis, vaquerosensis* spp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 221 pl. xli.

Chione purpurissata, LOWE 513.

†*Chione juanensis* p. 223, pl. xlii f. 1a, b; *schencki* p. 224 pl. xlii f. 5; spp. n., *temblorensis subtemblorensis* var. n. p. 225 Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932.—*C. marica*, HAYASAKA 361.

Circe gibba, pectinata, divaricata, figs., TALAVERA & FAUSTINO 879.

†*Clementia ricordeana* fig., BONČEV 119.

†*Cytherea guillanoni* sp. n. Cretaceous Madagascar, E. BASSE Monog. Paléont. Cretace Mad. 1931 p. 53 pl. ix f. 31.—*C. subovalis* Orb. fig., GRIFF 340.

Dosinia ponderosa fig., J. K. ALLAN 18.

†*Dosinia (Dosinidia) margaritana projecta* var. n. p. 217 pl. xxxix f. 2-4; *D. santana* sp. n. p. 217 pl. vii f. 1, 2 Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932.

†*Grateloupia stefaninii* sp. n. Pleistocene Somali, NARDINI Palaeontogr. ital. Siena 32 Suppl. 1 1933 p. 189 pl. xxiv (xix) f. 7 text-figs. 50, 51.

†*Lucinopsis bockhihoensis* p. 98 pl. ii f. 17a, b; *kosuiensis* p. 99 spp. n. Pliocene Formosa, NOMURA Sci. Rep. Tôhoku Univ. 16 1 1933.

Meretrix meretrix, MEER MOHR 551.—*M. meretrix, torrefactus*, TALAVERA & FAUSTINO 879.

†*Meretrix heluanensis* sp. n. Eocene Egypt, CUVILLIER Mem. Inst. Egypt 22 1933 p. 20 pl. ii f. 15.—*M. (Callista) proxima bruxellensis* Belgium, GLIBERT Mém. Mus. Roy. Hist. nat. Belg. 53 1933 p. 151 pl. ix f. 5.

Ortygia gallina L. *pyxoidea* var. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. x.

Paphia philippinarum infested by *Nymphonella tapetis*, OHSHIMA 608.—*P. hiamina, ferruginea, striata, turgida* figs., TALAVERA & FAUSTINO 879.

†*Perrierina bensoni* sp. n. Tertiary N.Z., L. C. KING Tr. Pr. N.Z. Inst. 63 3 1933 p. 351 text-figs. p. 352.

†*Pitaria*, HAYASAKA 361.

Protothaca jedomensis infested by *Nymphonella tapetis*, OHSHIMA 608.

†*Saxidomus barlowi* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 222 pl. xl f. 6 a, b.

Tapes [Paphia] aureus Gm. v. *pulchella* Lk. mut. *superba* mut. n., Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. x.

†*Tapes [Paphia] aurea* fig. p. 118, WERVEKE 934.

†*Thetironia* (= *Thetis* Sow.) *stojanovi* pp. 60, 80 pl. vi [not iv as in Summary] f. 9; *T. minor dagestanensis* pp. 69, 81 pl. vi f. 11, 11a; *T. m. circassensis* pp. 73, 81 pl. vi f. 8 vars. n. Cretaceous North Caucasus, MORDEVILKO Trans. Geol. prosp. Service U.S.S.R. 140 1932.

†*Thetis magna* sp. n. Jurassic Alberta, WARREN Tr. R.S. Can. 3 26 iv 1932 p. 31 pl. ii.

Tivela stultorum, F. N. CLARK 157.

Transennella [Pitaria S. G.] stimpsoni and abnormalities figs., POPENHOE & FINDLAY 688.

Venus (Anaitis) alta, (Anomalocardia) squamosa figs., TALAVERA & FAUSTINO 879.

†*Venus virginiana* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 225 pl. xxxvii f. 6 a-c.—*V. (Chione) byoritsuensis* Pliocene p. 84 pl. iii f. 7a, b; *taiwanensis* Pleistocene p. 86 pl. i f. 12, 13 (a, b) spp. n. Formosa, NOMURA Sci. Rep. Tôhoku Univ. 16 1 1933.

CARDIACEA.

†*Apricardia pironai*, PARONA 648.

Cardium elatum fig., J. K. ALLAN 18.—*C. corbis* Martyn, C. MCH. FRASER 286.—*Cardium*, L. GERMAIN 319a.—*C. papyraceum* Gm., GRUVEL 342.—*C. edule*, JESSEN 397.—*C. edule* chemical constituents, McCANCE & SHIPP 516.—*C. edule*, H. B. MOORE 561.—*C. edule*, re spatfall of *Mytilus*, J. H. ORTON 626.—*C. edule*, SCHWARZ 802.

†*Cardium besairiei* sp. n. Cretaceous Madagascar, BASSE Ann. Paléont. Paris 21 3-4 1933 p. 42 (130) pl. vii f. 1, 1a.—*C. (Trachycardium) porulosum belgium* var. n. Bruxellien Belgium,

GLIBERT Mém. Mus. Roy. Hist. nat. Belg. 53 1933 p. 145 pl. ix f. 2.—*C. bayeri* sp. n. Neogene Sumatra, HAANSTRA & SIKIER Pr. Acad. Sci. Amsterdam 35 10 1932 p. 1323 figs. 32–35.—*C. gudexi* p. 316 f. 7, 14; *C. (Trachycardium) cantuariense* p. 317 f. 1, 4, 5; spp. n. Tertiary N.Z., C. R. LAWS Trans. Proc. N.Z. Inst. 63 3 1933.—*C. (Acanthocardia) reedi* p. 213 pl. xxxvii f. 3; *C. (Trachycardium) woodringi* p. 214 pl. xxxvii f. 2; spp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932.—*C. riogrammense* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. e min. Brasil 8 1930 p. 221 pl. viii f. 1.—*C. cottaldi albensis* var. n. Cretaceous North Caucasus, MORDVILKO Trans. geol. & prosp. Service U.S.S.R. 140 1932 pp. 56, 80 pl. v f. 7, 7a.—*C. ochoterenai* sp. n. Cretaceous Mexico, MUELLERRIED Ann. Inst. Biol. Mexico 1933 3/4 pp. 331–334 f. 1, 2.—*C. (Trachycardium) nanpeizanense* Pleistocene p. 77 pls. i f. 7, 8, ii f. 8, 9; *C. (Nemocardium) torii* Pliocene p. 79 pl. iif. 6 a, b; *C. (Cerastoderma) hanzawai* Pliocene p. 79 pl. iii f. 18, 19 (a, b); *C. (Acanthocardia) cancellatum* Pliocene p. 81 pl. iii f. 9 a, b, NOMURA Sci. Rep. Tôhoku Univ. 16 1 1933.—*C. productum*, PARONA 648.

Cerastoderma lamarckii hemicardiaeformis var. n. Adriatic, COEN Mem. Com. talassogr. Ital. 192 1933 pl. x.

†*Conocardium snjatkovii* sp. n. Carboniferous, FEDOTOV Trans. Geol. Prospect Servia U.S.S.R. fas. 103 1932 pp. 68, 182 pl. vii f. 15–22.

†*Nemocardium brabanticum* sp. n. Belgium, GLIBERT Mém. Mus. Roy. Hist. nat. Belg. 53 1933 p. 148 pl. ix f. 3.

†*Protocardia erecta, obliquata*, spp. n. Jurassic Alberta, WARREN 3 26 iv 1932 pp. 30, 31, pl. i.

Rudicardium tuberculatum coalescens var. n. Venice, COEN Mem. Com. talassogr. Ital. 192 1933 pl. x.

Sphaerocardium paucicostatum planicosta, p. rarepartita vars. n. Adriatic, COEN Mus. Com. talassogr. Ital. 192 1933 pl. x.

Tendagurium subgen. n. of *Cardium* type *propebanneanum* sp. n. Cretaceous Africa, DIETRICH Palaeontograph Stuttgart Suppl. VII 2, 1, 1933 p. 50 pl. vi ff. 92, 93.

CHAMACEA.

†*Agriopleura douvillei* sp. n. p. 811 f. 17; *A. d. rayensis* var. n. p. 313 f. 18 lower Cretaceous Mexico, MUELLERRIED Ann. Inst. Biol. Mexico 1933 3/4.

†*Africardia sicoris* sp. n. Maestrichtien Turonian Spain, G. ASTRE Bull. Soc. Hist. nat. Toulouse 64 1 1932 p. 81 f. 10, 11.

†*Barrettia sparcitirata*, BOISSEVAIN & MACGILLAVRY 117.

†*Biradiolites collensis* sp. n. Maestrichtien Spain, G. ASTRE Bull. Soc. Hist. nat. Toulouse 64 1 1932 p. 100 pls. vii f. 2, viii f. 1.

†Caprinidae, L. R. COX 212.

Chama, F. HAAS 350.

†*Chama boulei* sp. n. Cretaceous Madagascar, BASSE 21 3–4 1933 p. 43 (131) pl. vii f. 6.

†*Chiapasella radiolitiformis*, BOISSEVAIN & MACGILLAVRY 117.

†*Chiapas* “subgen. n.” [non descr.], MULLERREID 580.

†Diceratidae, L. R. COX 212.

†*Durania arnaudi*, PARONA 648.

†*Goniatis* (Tenby), BISAT 105.

†Hippuritidae, L. R. COX 212.

†*Hippurites (Orbignya) canaliculatus, nabresinensis, toucasi*, H. (Vaccinites) galloprovincialis, gaudryi, sulcatus, chapari, PARONA 648.—H. Santonienne Spain, G. ASTRE 48.—H. (Orbignya) canaliculata, praebiculata, rennensis, G. ASTRE 50.

†*Megalodus (Neomegalodus) complanatus* Gumbel “v. n.,” DESIO 240.

†*Monopleura ? figolina lilelensis* var. n. Maestrichtien Cretaceous Spain, G. ASTRE Bull. Soc. Hist. nat. Toulouse 64 1 1932 p. 87 pl. i f. 3–4.—M. (Himeraelites) klinghardti p. 316 f. 20; M. (H.) ochoterenai p. 318 f. 21; M. (H.) aguilerai p. 319 f. 22; M. (H.) felixi p. 323 f. 25; M. (H.) mexicana p. 325 f. 26; M. (H.) medellini p. 326 f. 27; M. (H.) zapotitlensis p. 327 f. 28; M. (H.) paronai p. 328 f. 29; spp. n. Cretaceous Mexico, MUELLERRIED Ann. Inst. Biol. Mexico 1933 3/4.

†Monopleuridae, L. R. COX 212.

†*Myonia waterhousei* p. 412 pl. lii f. 2-3, *farleyensis* p. 413 pl. li f. 5-6, pl. lii f. 5, *dauidis* p. 413 pl. li f. 4, pl. lii f. 4, *parallela* p. 413 pl. lii f. 1, spp. n. Lower Marine Australia, W. S. DUN Rec. Aust. Mus. Sydney 18 8 1932.—*M. elongata*, *valida*, *carinata*, *gigas*, *minor*, *undata* *fragilis*; *M. accentuata* p. 400 pl. xlvii f. 4-5 sp. n.; *corrugata* p. 404 pl. i f. 3-4, sp. n.; *depressa* p. 405 pl. xlviii f. 4-5, sp. n.; *minor etheridgei* p. 407, var. n., H. O. FLETCHER Rec. Aust. Mus. 18 8 1932.

†*Orbignya resecta oblonga* pp. 46, 49 pl. i f. 1 Angoumien France, *canaliculata conica* pp. 46, 53 pl. i f. 3-5 Santonien France, vars. n.; *O. socialis constricta* var. n. p. 56 pl. i f. 8; *O. elongata* sp. n. p. 57 pl. i f. 9, 10, Coniacien France, ANTONINI Ann. Fac. Sci. Marseille (2) 6 1 1933.—*O. resecta oblonga* var. n. France, ANTONINI Ann. Fac. Sci. Marseille 1933 p. 49 figs.

†*Pachymyonia* gen. n. type *Maconia morrisii* Eth. fil.; *P. etheridgei* sp. n. Lower Marine Australia (Aust. Mus.), W. S. DUN Rec. Aust. Mus. Sydney 18 8 1932 p. 412 pl. li f. 2-3, pl. lii f. 6.

†*Praeradiolites* Campanien, G. ASTRE 48.—*P. balensis* Campanien Spain, G. ASTRE Bull. Soc. Hist. nat. Toulouse 64 1 1932 pp. 67, 68 f. 9.

†*Polyconites verneuii compressa* var. n. Aptien Spain, G. ASTRE Bull. Soc. Hist. nat. Toulouse 64 1 1932 pp. 51, 53 f. 7.

†*Praeradiolites maximus* p. 89 pl. ii ff. 1-2, Maestrichtien Spain sp. n., G. ASTRE Bull. Soc. Hist. nat. Toulouse 64 1 1932.

†*Pseudobarrettia* "subgen. n." [non descr.], MULLERRIED 580.

†*Pseudotoucasia catalaunica* sp. n. Aptien Spain, G. ASTRE Bull. Soc. Hist. nat. Toulouse 64 1 1932 p. 46 pl. i f. 1.

†*Radiolites alsinanus* p. 92 pl. iii f. 1, *jovis* p. 94 pls. iii f. 2, iv V, *similivalvis* p. 95 pl. vi f. 1, 2, vii f. 1, Maestrichtien Spain spp. n., G. ASTRE Bull. Soc. Hist. nat. Toulouse 64 1 1932.—*R. peroni*, *lusitanicus*, *radiosus*, *trigeri*, *macrodon*, *depressus*, *guiscardiana*, PARONA 648.

†*Radiolitidae*, L. R. COX 212.

†*Rudistae* Foss. Catal., KÜHN 431a.

†*Sauvagesia sharpei*, PARONA 648.

†*Sphaerulites patera*, PARONA 648.

†*Trechmannella* gen. n. type *Polyptychus morgani* Douvillé, L. R. COX Proc. Geol. Ass. London 44 4 1933 p. 388.

†*Toucasia carinata euzina* var. n. Amasra (Asia Minor) Barremian, G. ASTRE Bull. Soc. géol. Fr. 5 1 8-9 1931 pp. 697-698 figs.—*T. carinata orientalis* var. n. Lower Cretaceous Japan, NAGAO Proc. Imp. Acad. Tokyo 8 10 1932 pp. 511-514 figs.

†*Vaccinites dentatus*, *petrocoriensis*, G. ASTRE 49.—*V. moulini praebaussetensis* v. n. p. 77 figs., *rugosus* sp. n. figs. p. 79, *galloprovincialis major* v. n. p. 85 figs., *combalazieri* sp. n. p. 86 figs., ANTONINI Ann. Fac. Sci. Marseille 1933.—*V. dentatus longistylis* pp. 68, 72 pl. iv f. 4, *moulini praebaussetensis* pp. 76, 77 pl. vi f. 1-3; *V. intermedius* pp. 68, 72 pl. 5 f. 1, 2; *V. repelini* pp. 68, 74 pl. v f. 3, 4 spp. n.; *V. rugosus* pp. 76, 79 pl. v f. 5; *V. combalazieri* p. 86 pl. viii f. 1-4; France, ANTONINI Ann. Fac. Sci. Marseille (2) 6 1 1933.

MYACEA.

Aloidis [= *Corbula*] *gibba*, A. B. MOORE 561.

†*Corbula ima* sp. n. Miocene New Jersey, PILSBRY & HARBISON Proc. Acad. Nat. Sci. Philad. 85 1933 p. 119 pl. iv. f. 24, 27-30.—*C. lyra* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. e min. Brasil 8 1930 p. 231 pl. viii f. 6.—*C. takasago* sp. n. Pliocene, NOMURA Sci. Rep. Tôhoku Univ. 16 1 1933 p. 69 pl. ii f. 1a, b, 2a, b.—*C. (Corbula) taiwanensis* sp. n. Pliocene Formosa, NOMURA Sci. Rep. Tôhoku Univ. 16 1 1933 p. 106 pl. iii f. 10, 11 (a, b).

Cutellus adriaticus Coen "n. sp." (Odner, 1914, Erroneam. determinato come *C. pellucidus* Weink.) Coen 1931 p. 51, COEN & VATOVA.

Gastrochaena lata, FONT & SOLÉ 293.

†*Glycymeris oligofaujasi* fig., VENZO 911.

Mya arenaria, LANGSTROTH 482.—*M. arenaria* growth, NEWCOMBE 593.—*M. arenaria*, G. H. PARKER 647.

†*Mya arenaria* fig., p. 118, WERVEKE 934.

Pharella acutidens fig., TALAVERA & FAUSTINO 879.

†*Pleuromyidae*, Permian E. Greenland, H. FREEBOLD 297.

†*Prothyris bicarina* p. 287 f. 14, *aquilata* p. 288 f. 15, *hefteri* p. 289 f. 16-18 sp. n. Europe, MAUZ Senckenbergiana Frankfurt 15 3-4 1933.

Psammobia vatovai Coen "n. sp.," p. 50, COEN & VATOVA 184.

†*Pseudocorbula falconeri* sp. n. Triassic Uruguay, L. C. COX Ann. Mag. N.H. (10) 13 74 1934 p. 267 pl. x f. 6 a, b, 7, 8.—*P. emerita* sp. n. Trias Brazil, F. R. C. REED Monog. serv. geol. e min. Brasil 9 1929 pp. 36-37 pl. ii f. 4-6.

†*Quenstedtia fermiensis* sp. n. Jurassic Alberta, WARREN Tr. R. S. Can. 3 26 in 1932 p. 32 pl. i.

Sanguinolaria olivacea fig. growth asymmetrical growth begins in specimens longer than 6.3 mm., NOMURA 599.

†*Sanguinolaria hollowaysii* fig., VENZO 911.

†*Sanguinolites groenlandica* (Solenopsidae) sp. n. Permian E. Greenland, H. FREEBOLD Medd. Gronland 94 8 1932 p. 30 pl. i f. 14.

†*Solen gravidus baileyi* var. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 230 pl. xlv f. 5, 6.

Soletelleria cumingiana, minor, elongata figs., TALAVERA & FAUSTINO 879.

†*Stutchburia brasiliensis* sp. n. Permian Carboniferous Brazil, F. R. C. REED Monog. serv. geol. e min. Brasil 10 1930 pp. 26-27 pl. viii f. 1-3.

†*Tagelus clarki* sp. n. Miocene California, LOEL & COREY Univ. Calif. Pub. Geol. 22 3 1932 p. 229 pl. xlv ff. 2-4.

†*Terraia* gen. n. type *T. altissima* (Holdhaus) = *Solenomorpha a.* Holdhaus Estrada Nova Beds Brazil—Triassic Uruguay, L. C. COX Ann. Mag. Nat. Hist. (10) 13 74 1934 p. 269.

ADESMACEA.

†*Aspidopholas leuchsi* sp. n. E. Turkestan, BÖHM Z. deuts. geol. Ges. Berlin 85 2 1933 p. 112 pl. ii f. 2-6.

Barnea, AMEMIYA & OHSIMA 22.—*B. candida*, ROSE 761.

Jouannetia globosa, japonica, AMEMIYA & OHSIMA 22.

†*Jouannetia cumingi* Pliocene Timor figs., SIEVERTS 822.

Pholadidea, AMEMIYA & OHSIMA 22.

Pholas costata fig., J. K. ALLAN 18.

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Teredo norvegica, malleolus, L. E. ADAMS 6.—*T. norvegica* proportion of sexes, *T. navalis* (*T. beachi* Bartsch), W. R. COE 178.—*T. morsei*, W. R. COE 179.—*T. navalis* sexually mature two months, adult size one year, GRAVE 331.—*T. navalis*, SCHWARZ 802.

Xylophaga praestans fig., C. DONS 247.

Zachsia gen. n. Teredinidae Japan, *Z. zenkewitschi, lignani* spp. n. Japan, BULATOFF & RJABTSCHIKOFF Zool. Anz. Leipzig 104 1933 pp. 165-176 figs.

Zirfaea, AMEMIYA & OHSIMA 22.

ANATINACEA.

Anatina truncata fig., TALAVERA & FAUSTINO 879.

†*Arcomya* (*Pachymya* ?) *robustissima* sp. n. Cretaceous Africa, DIETRICH Palaeontograph. Stuttgart Suppl. vi 2 1 1933 p. 55 pl. vii f. 103, 106.

†*Deuteromya intusstriata*, GOČEV 325.

Lyonsia norvegica, LÖNNBERG 507.

†*Pecchiolia acuticostulata* sp. n. Tertiary Italy, LIPPARINI Bol. Soc. geol. ital. 52 1 1933 p. 2 pl. i f. 2.

†*Pholadomya parahybensis* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. e min. Brasil 8 1930 p. 229 pl. vii f. 5.

†*Pleuromya burnsi, nuda, oblongata, simplex*, spp. n. Jurassic Alberta, WARREN Tr. R. S. Can. 3 26 iv 1932 pp. 23-25 pls. i, ii.

Thracia convexa, dubia spp. n. Jurassic Alberta, WARREN Tr. R. S. Can. 3 26 iv 1932 pp. 26, 27 pl. i.

†*Thracia pristina* pp. 50, 51 pl. ii f. xv; *T. perversa* pp. 52, 53 pl. ii f. 17, 18, spp. n. Trias Brazil, F. R. C. REED Monog. serv. geol. e min. Brasil 9 1929.

SEPTIBRANCHIA.

POROMYACEA.

†*Cardiomorpha blatchfordi* sp. n. Permo-Carboniferous Western Australia, L. F. V. HOSKING J. Roy. Soc. W. Aust. 17 1931 pp. 8, 30 pl. vii f. 4a, b, 5.—†*Cardiomorpha eskesbergensis* sp. n. Devonian Europe, GRÜNEBERG Jber. naturw. Ver. Elberfeld 15 1925 p. 81 pl. ii f. 13, pl. iii f. 3.

†*Edmondia* ? *kansasensis* n. sp. [nom. nud.], SAYRE 780.

†*Grammysia anomala* (Hamiltonensis), ovata, inaequalis fig., WILSCHOWITZ 938.

†*Kochia capuliformis* figs., WILSCHOWITZ 938.

†*Leptodomus stadtfeldius* sp. n., MAUZ Senckenbergiana Frankfurt 15 3-4 1933 p. 287 f. 13a, b.—*L. latus, acutirostris* figs., WILSCHOWITZ 938.

†*Mioporomya bicarinata aequilata* var. n. Tertiary Italy, LIPPARINI Bol. Soc. Geol. ital. 52 1 1933 p. 5 pl. i f. 8.

†*Pleuromya idea fraasi, uniodes, trajani*, TZANCOV & BONČEV 902.

†*Sphenotus seleniformis* fig., WILSCHOWITZ 938.

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(a) RECENT.

Amplisepia apama fig., ALLAN 20.

Angeloteuthis michael, gabriel, W. D. LANG 481.

Anisoceras sp. fig., AIRAGHI 16.

Aegoceras capricornum fig., TZANCOV & BONČEV 902.

Alloteuthis subulata, ADAM 2.—*A. subulata*, TEISSIER 884.—*A. subulata*, J. A. GRIEG 336.

Architeuthidae, GRIMPE 338.

Architeuthis clarkei [sp. n.] Scarborough, W. J. CLARKE Naturalist July 1933 918, pp. 157, 158 fig.—*Architeuthis clarkei* sp. n. Scarborough, G. C. ROBSON Proc. Zool. Soc. Sep. 1933 p. 681 pl. i 754.—*Architeuthis* on the Genus and Distribution, ROBSON 754.—*A. dux* fig., J. A. GRIEG 336.—*A. dux*, M. R. TAYLOR 881.

Argonauta boettgeri fig., J. K. ALLAN 18.—*A. nodosa* fig., ALLAN 20.—*A. argo* figs., L. BOONE 122.

Bathypolypus arcticus, J. A. GRIEG 336.

Brachioteuthidae, GRIMPE 338.

Chiropsis mega "gen. et sp. n." [vide Soc. Zool. Fr. lvii no. 4 p. 288 1932] S.E. Isle Abaco, Bahamas, JOUBIN Ann. Inst. océan. Paris 13 1 1933 p. 30 f. 30-39.

Chiroteuthis lacertosa figs., JOUBIN 402.

Cirrobrachium danae sp. n. N. Atlantic, JOUBIN Ann. Inst. océan. Paris 13 1 1933 p. 7 f. 3-9.

Cirroteuthidae, GRIMPE 338.

Cranchiidae, GRIMPE 338.

Danoctopus schmidti gen. et sp. n. S.E. isle of Abaco (Bahamas), JOUBIN Ann. Inst. océan. Paris 13 1 1933 p. 4, figs. 1, 2.

Dosidicus gigas fig., L. BOONE 122.

Echinoteuthis danae gen. et sp. n. (Mastigoteuthidae) Antilles, Bermudas, Cape Verde, Azores, JOUBIN Ann. Inst. océan. Paris 13 1 1933 p. 13 f. 10-16.

Egea inermis sp. n. N.W. of Bermudas, JOUBIN Ann. Inst. océan. Paris 13 1 1933 p. 48 f. 47, 48.

Eledone moschata, BALDWIN 69; NOEL & JULLIEN 595.—*E. moschata* Leach (abnormal 7 and 9 arms), P. BONNET 121.—*E. moschatus* fig., L. BOONE 122.—*E. cirrosa* pls. i and ii, J. A. GRIEG 336.—*E. moschata* haemocyanin, ROCHE 755.—*E. aldrovandi*, VERRIER 913.

Gonatidae, GRIMPE 338.

Gonatopus = *Gonatopsis*, E. STRAND 857.

Graneledone verrucosa pls. iii and iv, J. A. GRIEG 336.

Illex illecebrosus figs., BOONE 122.—*I. coindeti*, TEISSIER 884.

Loliginidae, GRIMPE 338.

Loligo pealii, BACQ 56; effects of chemicals, BACQ 57.—*L. brevis, diomedae, pealeii, vulgaris*, figs., L. BOONE 122.—*L. vulgaris, forbesi*, J. A. GRIEG 336.—*L. vulgaris* Histology, KONOPACKI 435; NOEL & JULLIEN 595; muscular system, H. PLENK 684; figs., RANZI 717.—*L. pealei*, haemocyanin,

ROCHE 755.—*L. vulgaris*, SPARTA 836.—*L. pealii*, STEVENSON 854.—*L. vulgaris*, TEISSIER 884.—*L. vulgaris* Chemical contents, R. TUREK 897.

†*Ludwigia*, LORCHER 509.

Mastigoteuthis glaukopsis figs., JOUBIN 402.

Meteledone, ROBSON & BIDDER 753.

Nautilus pompilius, BIDDER 98; chemical contents, R. TUREK 897.

Nototodarus gouldi, ALLAN 20.

Octopodidae, GRIMPE 338.

Octopus smedleyi sp. n. Raffles Museum, ROBSON Bull. Raffles Mus. Singapore 7 1932 p. 24 fig.—*Octopus vulgaris* variation of radula, W. ADAM 3.—*O. maculosus* fig., ALLAN 20.—*O. vulgaris* hydrolysis experiments, BALDWIN 69.—*O. bimaculatus*, *brevipes*, *vulgaris*, *verrilli*, figs., L. BOONE 122.—*Octopus*, BUYTENDIJK 143.—*O. vulgaris*, R. M. MAY 533.—*O. vulgaris*, NOEL & JULLIEN 595.—*O. vulgaris*, muscular system, H. PLENK 684.—*O. vulgaris*, RAABE 716.—*O. vulgaris*, haemocyanin, ROCHE 755.—*O. cyaneus* Habits in Captivity, SOUEF & ALLEN 831.—*O. vulgaris*, VERRIER 913.—ZUNZ 957.

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Rondeletia minor and *Micrococcus pierantonii*, ZIRPOLO 956.

Rossia tenera, L. BOONE 122.—*Rossia*, FEDOROW 274.—*R. glaucopsis*, *macro soma*, J. A. GRIEG 336.—*R. mölleri*, *glaucopsis*, *palpebrosa*, figs., tentacles, GRIMPE 338.

Scaevurgus uniccrrhus figs., L. BOONE 122.

Sepia officinalis L., CUÉNOT 216; habits, HERRINGTON 367.—*S. officinalis*, KLINGHARDT 427.—*S. esculenta*, MORITA 570.—*S. officinalis*, NOEL & JULLIEN 595.—*S. officinalis*, muscular system, H. PLENK 684; RANZI 717.—*S. officinalis* embryo, RANZI 718.—*S.*

officinalis, haemocyanin, ROCHE 755.—*Sepia*, G. V. STUDNITZ 863.—*S. officinalis*, TEISSIER 884.—*S. officinalis* Chemical contents, R. TUREK 897.—*S. officinalis*, VERRIER 913.—*S. officinalis* and *Bacillus sepiæ*, ZIRPOLO 956.

Sepiadarium malayense sp. n. Raffles Museum, ROBSON Bull. Raffles Mus. Singapore 7 1932 p. 28 fig. 3.

Sepiella maindroni, MORITA 570.

Sepietta oweniana, J. A. GRIEG 336.

Sepiola rondeletii, L. BOONE 122.—*S. atlantica*, *aurantiaca*, J. A. GRIEG 336.—*S. intermedia* and *Bacillus pierantonii*, ZIRPOLO 956.

Sepiolidae, GRIMPE 338.

Sepioloidea lineolata fig., ALLAN 20.

Sepioteuthis australis fig., ALLAN 20.—*S. sloanii* figs., L. BOONE 122.—*S. lessoniana* Fér. figs., IKEDA 386.

Solitosepia plangon fig., ALLAN 20.

Spirula spirula fig., ALLAN 20; OKADA 610; Chemical contents, R. TUREK 897.

Teuthowenia megalops figs., JOUBIN 402.

Tremoctopus violaceus, *ocellatus*, SPARTA 836.

Valdemaria danae, JOUBIN figs., 402.

Cephalopoda.

(b) FOSSIL.

†*Acanthoceras coleroonense*, *footeanum*, *daviesi*, G. DE P. COTTER 200.

†*Acanthodiscus radiatus* fig., ROMAN 759.

†*Acanthopheras* gen. n. type *Ophiceras gibbosum* Griesb., DIENER Centr. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Acanthophiles subcornuerianus* sp. n. Cretaceous Japan, SHIMIZU Sci. Rep. Tôhoku Univ. 15 1 1931 p. 32 pl. i f. 8, 9.

Acrochordiceras, ARABU 35.

†*Actinocamax depressus*, *plenus*, STOLLEY 856.

†*Actinoceras turinense, billingsi, janesvillense*, spp. n. N. Amer. and Canada, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 pp. 20-23 pl. xviii.—*A. ruedemannii, beloitense*, TEICHERT 883.

†*Adrianites*, A. K. MILLER 541.

†*Aganides*, N. of England, BISAT 104.

†*Agathiceras*, A. K. MILLER 541.

†*Agoniatites fidelis* Lower Devonian figs., SPATH 837.

†*Agoniatitidae* Fam. nov. (= *Agoniatitides* Haug 1898) Cephalopoda, SCHINDEWOLF Abh. preuss. geol. LdAnst. 148 1933 p. 76.

†*Amaltheus margaritatus* fig., TZANCOV & BONČEV 902.

†*Ammonites* figs., H. FIEBOLD 296.

†*Anaplanulites hyatti* sp. n. Jurassic California, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5 1932 p. 913 pl. xxxii f. 3; pl. xxxiii.

†*Anarcestinae* (Steinm.) subfam. nov. SCHINDEWOLF Abh. preuss. geol. LdAnst. 148 1933 p. 89.

†*Anasibirites salisburyi, perrini, romeri, wanbuskirki, wardi, weaveri, weleri, whitei, whitfieldi*, spp. n., MATTHEWS Lower trias ceph. Utah T. 1 f. 27-29 T. 11 figs. 1-2 1929.

†*Ancyloceras choshiense*, pl. iii f. 22-24; *giganteum* (ex Yabe & Shimizu MS.) pl. iv f. 7, spp. n. Cretaceous Japan, SHIMIZU Sci. Rep. Tôhoku Univ. 15 1 1931 p. 37.

†*Apheloceras falciferum* sp. n. Carboniferous N. China, T. H. YIN Palaeont. Sinica B. 11 3 1933 p. 8 pl. i f. 2-4.

Aptychus, BLANCHET 109.

Arcestes, ARABU 35.

†*Archaeosepia naefi* gen. et sp. n. Tertiary, SZÖRÉNYI Földtani Közlöny 63 7-12 1933 p. 186 pl. i f. 1-2.

†*Arctohungarites* gen. n. type *Hungarites triformis* Mojs., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Arietoceltites* gen. n. type *Tropiceltites arietitoides* Dien., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Aristoptychites* gen. n. type *Ptychites gerardi* Blanford, DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Armenoceras ehlersi* sp. n. Lake Huron, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 p. 18 pl. xiv.

†*Arnioceras* E. Indies, JAWORSKI 396.

†*Asianites sogurenensis, ajdaralensis*, gen. et spp. nov. Permian, Russia, RUZENCEV Bull. Soc. Nat. Moscow Sect. Geol. 41 2 1933 pp. 166, 167 pl. iv f. 3, 4; pl. iv f. 9.

†*Aspidoceras babeaunum thieri* var. n. Callovien France CORROY, Mem. Carte Géol. France 1932 p. 157 pl. xi f. 5-6.—*Aspidoceras* fig., H. FIEBOLD 296.—*A. douvillei, babeaui, faustum, ovale, depereti, kobyi* figs., MAIRE 519.

†*Asteroceras falloti* sp. n. Lotharingien France, C. GÉRARD Bull. Soc. geol. Fr. 5 1 8-9 1931 p. 616 pl. xxxii.

†*Astieria rigida, atherstoni* figs., ROMAN 759.

†*Aulacostephanus quenstedti* p. 321 pl. xx f. 1 a, b; *crassicosta* p. 323 pl. xx f. 2 a, b; *mauvagensis* p. 323 pl. xxi f. 3 a, b; spp. n. Kimmeridge Haute-Marne, DURAND Bull. Soc. geol. Fr. 5 II 3-4 1932.

Baculites saghalinensis, SHIMIZU 815.

†*Barrandeoceras bohemicum* Upper Silurian, SPATH 837.

†*Belemnites hastatus* fig., DESIO 239.—*B. acuaris gigas* Qu. = *Bel. ravi* Werner, KLÄHN 425.—*B. borealis, pandero*, SAMOILOVICH & BODYLEVSKY 776.—*B. apicicurvatus* fig., TZANCOV & BONČEV 902.

Belemnitidae Cretaceous Bulgaria, COHEN 187.

†*Beloitoceras janesvillense, clochense murrayi* spp. n. dolomite N. Amer. and Canada, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 pp. 99, 107, 108, pls. xxx, xxxvii.

†*Belosepia* n. sp. Tertiary, SZÖRÉNYI Földtani Közlöny 63 7-12 1933 p. 188 pl. i f. 7.

†*Beudanticeras shikokwense* (ex MS. Yabe & Shimizu) **sp. n.** Cretaceous Japan, SHIMIZU Sci. Rep. Tôhoku Univ. 15 1 1931 p. 26 pl. iv f. 5, 6.

†*Beyrichoceratidae* N. of England, BISAT 104.

†*Bornhardticer* **gen. n.** type *Placenticer* *discoideale* G. Müller, BÖHM & RIEDEL Jahrb. preuss. Geol. LdAnst. Berlin 53 1933 pp. 112, 122.

†*Brodicer* *tumidum* p. 34 pl. iv f. 3, *clausum* p. 35 pls. iii f. 7, 8, iv f. 1; *gradatum* p. 36 pl. iv f. 6-8; *alticarinatum* p. 37 pls. iv f. 11, v f. 1, 3, vii f. 8; *retrogradum* p. 38 pl. iv f. 4 **spp. n.** Univ. Pisa Colln. Permian Europe, MERLA Palaeont. ital. Siena 33 (N.S. 3) 1932 (1933).

†*Burenoceras* (?) *reticulatum* **sp. n.** Ordovician Japan, KOBAYASHI J. Fac. Sci. Univ. Tokyo Geol. Min. (2) 3 7 1933 p. 272 pl. ii f. 2-4.

†*Cadoceras elatmae* and var. fig., V. N. OGNEV 606.

†*Cadoceras nanseni*, SAMOILOVICH & BODYLEVSKY 776.

†*Canadoceras riogramamense*, *andromeda*, **spp. n.** Cretaceous Brazil, MAURY Monog. serv. geol. e min. Brasil 8 1930 pp. 169, 171 pls. xxi, xx.

†*Cardioceras* figs., H. FIEBOLD 296.

†*Centrocyrtoceras relaxum*, *C. ? pericinctum*, *C. vicinum*, *ridleyense*, *filosum*, *C. ? whiteavesi* **spp. n.** N. Amer. and Canada, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labo. 28 1-3 1933 pp. 47-56 pl. xxviii.

Ceratites, ARABU 35.—*C. guerini*, *catalaunicus*, *almerai*, *occidentalis*, BATAILLER & GUERIN 80.

†Cephalopoda Illustrations of the principal species of Ammonites employed as zonal indices in the British Jurassic, W. J. ARKELL pp. 601-613 41.—Cephalopoda triadica II, KUTASSY 469.

†*Chartronia speciosa* p. 24 pl. ii f. 13; *venustula* p. 25 pl. ii f. 9-12, **spp. n.** Univ. Pisa Colln. Permian Europe, MERLA Palaeont. ital. Siena 33 (N.S. 3) 1932 (1933).

†*Cheiloceras* (subgen. ?) *acutelobatum* **sp. n.** Devonian Europe, GRÜNEBERG

Jber. naturw. Ver. Elberfeld 15 1925 p. 71 pl. i f. 10.

†*Choffatia paolii* **sp. n.** Oolite Somali, STEFANINI Palaeontogr. ital. Siena 32 suppl. 1 1933 p. 30 pls. i, v.

†*Chondroceras russelli* **sp. n.** Jurassic California, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5 1932 p. 913 pl. xxvii f. 6-8.

†*Cimonia subrecta* p. 308 pl. xxxv f. 1, 2; *vestali* p. 311 pl. xxxvi f. 1, 2, **spp. n.** Eocene Mississippi, MILLER & THOMPSON J. Paleont. Sharon Mass. 7 3 1933.

†*Clarkoceras newton-winchelli*, *holte-dahli*, SPATH 837.

†*Clypeoceras vidarbhi falciplicatus* **var. nov.** Trias S. China, TIEN Palaeont. Sinica B. 15 1933 pp. 3, 14 pl. ii f. 2-8.

†*Colombiceras satowi* **sp. n.** Cretaceous Japan, SHIMIZU Sci. Rep. Tôhoku Univ. 15 1 1931 p. 34 pl. iii f. 5-10.

†*Cornaptychus nagatoensis* **sp. n.** Jurassic Japan, NAGAO Proc. Imp. Acad. Tokyo 8 10 1932 pp. 515-517 figs.

Cosmocerotidae, Cretaceous Bulgaria, COHEN 187.

†*Costidiscus rakusi densicostata* **var. n.** p. 24 pl. i f. 8, 9, 12-14; *C. nodosotriatus sabyense* **var. n.** p. 25 pl. i f. 6, 7; *C. dinodosus* **sp. n.** p. 26 pl. ii f. 8, 11, 13, pl. vi f. 4-6, Cretaceous Crimea, VORONETZ Trans. Geol. Prosp. Serv. U.S.S.R. 241 1933.

†*Crassiceras* **gen. n.** [Hildoceratidae] first sp. *Lillia canavarii* Franceschi p. 43 pl. v f. 7-9; *C. latum* p. 43 pl. v f. 10; *dimorphum* p. 43 pls. v f. 11, vii f. 11, 12, **sp. n.** Univ. Pisa Colln. Permian Europe, MERLA Palaeont. ital. Siena 33 (N.S. 3) 1932 (1933).

†*Cycloceras kiaeri* p. 153 pl. xxiii; *hoelandense* p. 154 pl. xxiii; *trondhjemense* p. 155 pl. xxiii **spp. n.** Ordovician Norway, A. F. FOERSTE Skr. Norske Vidensk-Akad. Oslo 1932 4 1933.

†*Cylindroteuthis tornatilis* figs., N. V. OGNEV 606.

†*Cymatoceras pseudoneokomiense* **sp. n.** Cretaceous Japan, SHIMIZU Sci. Rep. Tôhoku Univ. 15 1 1931 p. 18 pl. i f. 1-4.

†*Cyrtendoceras remelei* Ordovician Balkans p. 165 pl. ii f. 2 A, B, C; *estoniense* p. 168 pl. ii f. 3 A, B text-fig. 2 Estonia spp. n., A. F. FOERSTE Ohio J. Sci. 31 3 1932.—*C. holmi* sp. n. Wanwankow limestone S. Manchuria, KOBAYASHI J. Fac. Sci. Univ. Tokyo Geol. 3 7 1933 p. 276 pl. iv f. 10.

†*Cyrtoceras schoolcrafti* Clarke fig. pl. xxxii, A. F. FOERSTE 290.

†*Cyrtoclymenia* figs., SPATH 837.

†*Cyrtonyboceras* gen. n. of Armonoceratidae genotype *Orthoceras haesitans* Billings 1857 with *clouei* Brod. and *barraudii* sp. n., TEICHERT Palaeont. Stuttgart 78 4-6 1933 pp. 145, 146.

†*Cyrtorizoceras mineapolis* fig., FOERSTE 290.

†*Dactylioceras*, cf. *D. crassifactum* Hebrides, HARTLEY 359.

†*Daraelites praecursor* sp. n. Namurien France, FROMAGET Bull. Soc. géol. Fr. 5 1 8-9 1931 p. 659 pl. xxxvi.—*D. culmiensis* sp. n. Tertiary Europe, KOBOLD Jahrb. preuss. Geol. LdAnst. Berlin 53 (1932) 1933 p. 506 pl. xxiii f. 45-48.

†*Denckmannia elegans* p. 17 pl. i f. 3, 5, 12; *armata* p. 20 pls. i f. 6, ii f. 1-3; *cornucopia* p. 22 pl. ii f. 4, 6-8; spp. n. Univ. Pisa Colln. Permian Europe, MERLA Palaeont. ital. Siena 33 (N.S. 3) 1932 (1933).

†*Deirotoceras scofieldi*, *kindlei*, *paquetense*, spp. n. N. Amer. and Canada, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 pp. 33-35 pls. xv, xvi.

Desmoceratidae, Cretaceous, Bulgaria, COHEN 187.

†*Diestoceras staufferi*, *cornellense*, *D. ? romingeri* spp. n. Trenton and Black R. formation N. Amer. and Canada, A. F. FOERSTE Denison Univ. Bull. 33 3 J. Sci. Labs. 28 1-3 pp. 143-145 pls. xxxiv, xxxv.

†*Dimorphoceras* N. of England, BISAT 104.

†*Discoceras antiquissimum* fig., VÁS-CÁUȚANU 907.

†*Discoptychites* gen. n. type *Ptychites megalodiscus* Beyr., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Douvilleiceras nodosocostatiforme* sp. n. Cretaceous Japan, SHIMIZU Sci. Rep. Tōhoku Univ. 15 1 1931 pl. i f. 6, 7.

†*Ectenoceras* [gen. n.] p. 269 (Ulrich & Foerste MS.) with *E. curvatum* Kobayashi; *E. subcurvatum* pl. i f. 9; *E. ruedemannii* pl. ii f. 5, 11, spp. n. p. 270 Wanwankow dolomite S. Manchuria, KOBAYASHI J. Fac. Sci. Univ. Tokyo Geol. 3 7 1933.

†*Edmundites* gen. n. type *Arpadites rimkinensis* Mojs., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Ehlersoceras* gen. n. type *E. huronense* dolomite Canada sp. n., A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 p. 125 pl. xxix.

†*Ellesmereoceras foerstei* p. 268 pl. i f. 1, 11; *abruptum* p. 269 pl. i f. 2, 8, spp. n. Ordovician Japan, KOBAYASHI J. Fac. Sci. Univ. Tokyo Geol. Min. (2) 3 7 1933.

†*Elobiceras elobiensis* Choff., *urietiforme* Spath. figs., AIRAGHI 16.

†*Elrodoceras abnorme*, TEICHERT 883.

†*Endoceras stensetense* p. 149 pl. xxiii, *vehnense* p. 150 pl. xxv spp. n. Ordovician Norway, A. F. FOERSTE Skr. Norske Vidensk.-Akad. Oslo 1932 4 1933.

†*Eoasianites* gen. n. for *subhanidi* sp. n. Permian (lower Artinskien) Russia, RUZENCEV Bull. Soc. Nat. Moscou Sect. Géol. 41 2 1933 pp. 165, 166, 178 pl. iv f. 1, 2.

†*Eothinites* gen. nov. *E. kargalensis*, *aktastensis* spp. n. (Upper Artinskien) Permian Russia, RUZENCEV Bull. Soc. Nat. Moscou Sect. Géol. 41 2 1933 pp. 169, 170, 171, 179 pl. iv f. 9.

†*Epiceratites* subgen. n. of *Ceratites* Trias, C. DIENER Foss. Catal. 8 p. 93 1915 [omission].

†*Epigymnites* gen. n. type *Gymnites ecki* Mojs., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Euechioceras exoletum* sp. n. Jurassic California, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5 1932 p. 909 pl. xxvii f. 1-5.

†*Eutrepheoceras pernambucense* nom. nov. = *Nautilus sowerbyanus* White 1887 non Orb. Paléont. Fr., MAURY Monog. Serv. géol. e min. Brasil 8 1930

p. 249.—*E. jonesi* sp. n. Eocene Alabama, MILLER & THOMPSON J. Paleont. Sharon Mass. 7 3 1933 p. 303 pl. xxxiv f. 1, 2.

†*Famminoceras dolmagii* p. 75 pl. v, *F. bodegae* p. 80 pl. ix, spp. n. *F. kunae crassum*, *k. latum*, vars. n. p. 78 pl. ix Maude formation British Columbia, McLEARN Tr. R. S. Can. 3 26 iv 1932.

†*Fayettoceras* gen. n. p. 134 type *Cyrtoceras thompsoni* figd. pl. xxxi; *F. beloitense* sp. n. dolomite Wisconsin p. 135 pl. xxxiv, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933.

†*Frechiella achillei linariensis* var. n. Lias Kalamos, RENZ Abh. schweiz. palaeont. Ges. 52 1932 No. 1 p. 9 pl. i f. 7, Ta.—*F. kammerkarensis* Stolley var. *buranensis* var. n. Lias Central Apennines p. 173 pl. vi f. 1, 1 a-b, *F. stolleyi*, RENZ Ecl. geol. helv. 26 2 1933.

†*Gangadharites* gen. n. type *Beyrichites gangadhara* Dien., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Gastrioceras lineatum*, *cancellatum*, *crenulatum*, *cancellatum*, *cumbriense*, *subcrenulatum*, *circumnodosum*, *coronatum*, BROMEHEAD & others 132.

†*Geisonoceras strandi* sp. n. Ordovician Norway, A. F. FOERSTE Skr. Norske Vidensk.-Akad. Oslo 1932 4 1933 p. 153 pl. xxv.

†*Gephyroceras pernai*, *gerolsteinense* fig., ANNISS 28.—*G. intumescens*, DU-TERTRE 256.

†*Glyphioceras striatum waldeckense* subsp. n. Carboniferous Europe, HAUBOLD Jahrb. preuss. geol. LdAnst. Berlin 53 (1932) 1933 p. 242 pl. xviii f. 5.

†*Glyptoxoceras brasiliense* p. 183, *parahybense* p. 185 spp. n. Cretaceous Brazil, MAURY Monog. serv. geol. e min. Brasil 8 1930 pl. xi.

†*Glyphioceras intermedium* "n. sp." Kobold Haubold 1930, KOBOLD 433.

†*Goniatites* N. of England, BISAT 104.—*G.* figs., SPATH 837.

†*Grossouvria spathi* sp. n. Lower Oolite Somali, STEFANINI Palaeont. ital. 32 Suppl. p. 34 pls. ii [x] f. 3, v [xiii] f. 7.

†*Hamulina renngarteni* sp. n. p. 27 pl. ii f. 4-6; *H. vogdti* sp. n. p. 28 pl. v f. 1-3, Cretaceous Crimea, VORONETZ Trans. Geol. Prosp. Serv. U.S.S.R. 241 1933.

†*Haploceras* Cretaceous Mexico, MUELLERRIED 579.

†*Harpoceras lythense falcatum*, *l. lineatum*, KLÄHN 425.

†*Harpoceratidae* Callovien France, CORROY 199.

†*Hecticoceras issa* sp. n. Lower Oolite Somali, STEFANINI Palaeont. ital. 32 Suppl. p. 21 pls. i [ix] f. 1, v [xiii] f. 1.

†*Hercoglossa orbiculata* (Tuomey); *H. meglameryae* p. 322 pl. xxxviii f. 1, 2, spp. n. Eocene Alabama, MILLER & THOMPSON J. Paleont. Sharon Mass. 7 3 1933.

†*Hildoceras undicosta* p. 50 pl. vii f. 2, *caterinii* p. 53 pl. vii f. 5, spp. n. Univ. Pisa Colln. Permian Europe, MERLA Palaeont. ital. Siena 33 (N.S. 3) 1932 (1933).

†*Hildoceratidae*, MERLA 536.

†*Holcophylloceras falciferum* sp. n. Jurassic California, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5 1932 p. 908 pl. xxvi f. 4, 5.

†*Holzappeloceras* Mill. em. = *Parodicer* Wedekind 1913 non Hyatt 1883, type *Tornoceras convolutum* Holzappel 1895, SCHINDEWOLF Abh. preuss. geol. LdAnst. 148 1933 pp. 89, 99.

†*Hoplites brandesi* fig., ROMAN 759.

†*Huanghoceras linchengense* p. 2 pl. iii f. 1-3; *wangi* p. 22 pl. ii f. 9 spp. n. Carboniferous N. China, T. H. YIN Palaeont. Sinica B. 11 3 1933.

†*Hungarites strombecki*, CLAUS 160.

†*Indoceras ismaeli libyca* var. n. p. 201 pls. iv f. 1, 2, v f. 5, 8; *I. checchii* sp. n. p. 203 pl. v f. 1, 2, 6, 9 Upper Cretaceous Tripolitania, SORRENTINO Bol. Soc. geol. ital. 51 2 1932.

†*Indoclonites* gen. n. type *Clonites gracilis* Dien., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Indojuavites* gen. n. type *Juavites angulatus* Dien., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Inflatoceras inaii* (ex Yabe & Shimizu MS.) sp. n. Cretaceous Japan, SHIMIZU Sci. Rep. Tōhoku Univ. 15 1 1931 p. 39 pl. iv f. 8.—*I. aequatoreal* Stol. fig., AIRAGHI 16.—*I. inflatum*, *varicosum*, *ootatoorensis*, *neuparthi*, *rado-vari-novi*, MIKINŌ 538.

†*Kamptokephalites misorobensis* nom. nov. = *M. [Acrocephalites] elephantinus* Lemoine non Sowerby, SPATH Palaeont. Indica N.S. 9 2 1933 p. 821.

†*Kashmirites obliquecostatus* sp. n. Trias S. China, TIEN Palaeont. sinica B. 15 1933 p. 32 pl. iii f. 5 a-c.

†*Kentlandoceras* gen. n. type *K. schrocki* sp. n. Black R. dolomite Canada p. 78 pl. vii f. 2 A, B, *K. wilsonae*, *husseyi* spp. n. dolomite Canada pp. 74, 75 pls. xxv, xxix, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933.

†*Kionoceras timidum* sp. n. Upper Red limestone Dalecarlia, THOEDSSON Acta Univ. lund 28 6 1932 p. 11 pls. i f. 8, v f. 7 text-fig.

†*Kochoceras whiteavesi* sp. n. = *Ac-tinoceras bigsbyi* Whiteaves 1892, TEICHERT Palaeont. Stuttgart 78 4-6 1933 p. 168 text-fig.

†*Kossmaticeras madagascarensis* sp. n. Cretaceous Madagascar, É. BASSE Monog. Paléont. Cret. Mad. 1931 p. 25 pl. ii f. 18.

†*Lambeoceras confertum* sp. n. dolomite N. Amer., A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 p. 42 pl. xxiv.

†*Laphmoceras* gen. n. type *Cyrtoceras corniculatum* Hall p. 76, *L. scofieldi* sp. n. pl. 77 pl. xxvii dolomite Minnesota, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933.

Latidorsella pseudoinais, SHIMIZU 815.

†*Leopoldia biasselensis* fig., *L. jodariensis*, *castellanensis* figs., ROMAN 759.

†*Leworthoceras husseyi* sp. n. Trenton formation in Univ. Michigan, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 p. 30 pl. xx.

†*Lillia planulata* fig., MERLA p. 13 pl. i f. 1, 4 536.

†*Lioceras opalinum* Rein fig., KLÄHN 425.

†*Liparoceras bechei* fig., TZANCAV & BONČEV 902.

†*Lithacoceras gananense* sp. n. Middle Oolite Somali, STEFANINI Palaeont. ital. 32 Suppl. p. 44 pls. iii [xi] f. 5, 6, v [xiii] f. 13.

†*Litoceras subbiforme* (non Cassav.) = *Miltites* (?) sp. nov., REGNY 782.

†*Loganoceras* gen. n. type *Cyrtoceras regulare* Billings p. 69; *L. paquettense* sp. n. Ontario, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 p. 72 pl. xxix.

†*Lytoceras konusch-obaense* sp. n. pp. 4, 13 pl. iii f. 3, 4, 11; *L. phestus pseudodenssecostata* var. n. p. 6 pl. i f. 1-3; *L. subdenssefimbriatum* sp. n. pl. v f. 1-3; *L. (Hemitetragonites) crebrisulcatum sabyiensis* var. n. p. 8 pl. ii f. 1, 2, 16; *L. (H.) lentescens* sp. n. p. 10 pl. iv f. 5, 6; *L. simphropolitanum* p. 15 pl. iv f. 3, 4, 7, 8; *L. borissiakii* p. 17 pl. iii f. 13, 14; *L. gertrudae* p. 18 pl. i f. 18, 19, pl. iii f. 7, 12; *L. (Protetragonites) quadrisulcatum taurica* var. n. p. 21 pl. ii f. 9, 10, 14, pl. vi f. 7; *L. (P.) q. crassa* var. n. p. 22 pl. ii f. 3, 12, 15; *L. taïganense* sp. n. p. 23 pl. i f. 10, 11; Cretaceous Crimea, N. S. K. VORONETZ Trans. Geol. Prosp. Serv. U.S.S.R. 241 1933.—*L. (Gaudryceras) rivaldii* sp. n. Cretaceous Madagascar, É. BASSE Monog. Paléont. Cret. Mad. 1931 p. 16 pl. i f. 24.—*L. torulosum* Schübl., KLÄHN 425.—*L. cornucopiae* fig., TZANCOV & BONČEV 902.

†*Macrocephalites* (*Kamptokephalites*) *somalensis* sp. n. Lower Oolite Somali, STEFANINI Palaeont. ital. 32 Suppl. p. 25 pl. v [xiii] f. 2.—*M. typicus balkarensis*, var. n. Callovian N. Caucasus, IL'IN Bull. United Geol. Prosp. Serv. U.S.S.R. 61 94 1932 p. 1432 (2).—*M. ishmae*, SAMOILOVICH & BODYLEVSKY 776.

†*Manitoulinoceras* ? *canadense*, *wyko-fense*, *warsawense* spp. n. dolomite N. Amer. and Canada, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 pp. 127-128 pl. xxv.

†*Marathonites krasnopolskyi* quadridentata, tridentata, asymmetrica, bidentata, vars. n. Permian Russia, RUZNEV Bull. Soc. Nat. Moscow Sect. Geol. 41 2 1933 p. 177 pl. v f. 12, 13; 14, 15; 16, 17; 18.—*M. invariabilis* sp. n. pp. 173, 180 pl. v f. 1-3; *M. timorensis typica*, t. semidivis, t. tridentata, t. quadridentata vars. n. pl. v f. 4, 5; 8, 9; 10, 11, Permian Russia, RUZNEV Bull. Soc. Nat. Moscow Sect. Geol. 41 2 1933.

†*Maelonoceras*, FOERSTE 290.

†*Maenioceras* nom. nov. = *Maenoceras* auctt. non Hyatt; type *Goniatis terebratus* G. & F. Sandberger Devonian Europe, SCHINDEWOLF Abh. Preuss. Geol. Landesanst. N.F. 148 1933 p. 104.

†*Malletioptychites* gen. n. type *Ptychites malletianus* Stol., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Manticoceras intumescens*, nodulosum, figs., ANNISS 28.

†*Margaritropites* gen. n. type *Anatropites margaritifformis* Dien., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Meekoceras kneichowense* pp. 16, 3 pl. ii f. 1a-e; *evolutum* pp. 17, 3 pl. iii f. 1 a-d; *ellipticum* p. 19, 3 pl. iii f. 2 a-c, 3 a-c; spp. n. Trias, S. China, TIEN Palaeont. Sinica B 15 1 1933.

†*Meioceras constrictum* sp. n. Cuba, PILSBRY & AGUAYO Nautilus 46 4 1933 p. 122 pl. vi f. 5.

†*Mercaticeras humeralis* p. 45 pl. vi f. 1-3, *rursicostatum* p. 46 pl. vi f. 11, *stefaninii* p. 48 pl. vi f. 8, 9, spp. n. Univ. Pisa Colln. Permian Europe, MERLA Palaeont. ital. Siena 33 (N.S. 3) 1932 (1933).

†*Metacoceras discoideum* sp. n. Permian Dolomites, MERLA Mem. Inst. geol. Univ. Padova 9 1931 [No. 2] p. 191 pl. vii f. 1.—*M. cavatiforme angulatum* n. var. [nom. nud.], SAYRE 780.

†*Mortoniceras (Pervinquieria?) nanum extrema* var. et sp. n. p. 411 figs.; *M. (P.) rigidum* p. 413 fig.; *M. (Deiradoceras) cunningtoni* p. 416 figs., *devonense* p. 419 figs., *bipunctatum* p. 422 figs., *albense* p. 424 figs., *albense transitoria* p. 428 fig.; *M. (Durnovaries) postinflatum* p. 433 figs., *subquadratum* p. 435 figs., *subquadratum*

crassicostata, *subquadratum tumida* p. 435 figs.; *M. kentronotus* p. 435; *M. (Cantabrigites) catabrigense* p. 438, *subsimpler* p. 439, *minor* p. 440, *minor serpentina* p. 440 spp. & vars n. Gault England, SPATH Monog. Palaeontogr. Soc. 10 1933.

†*Multicameroceras* gen. n. for *Ellesmereoceras* (?) *multicameratum* Kobayashi 1931 p. 273 figs.; *M. cylindricum* sp. n. p. 274 p. ii f. 14, pl. iv f. 5 Wankow dolomite S. Manchuria, KOBAYASHI J. Fac. Sci. Univ. Tokyo Geol. 3 7 1933.

†*Nautilus (Hercoglossa) phosphaticus* sp. n. S. Tunis, BÉDÉ Bull. Soc. Sci. nat. Maroc. 12 7-8 1933 p. 283 figs.—*N. (Menuthionautilus) kieslingeri* "gen. et sp. n." [subgen. n. et sp. n. non descr.] Trias Madagascar, M. COLLIGNON C.R. Acad. Sci. Paris 197 18 1933 p. 993.—*N. sanfilippoi* sp. n. Upper Cretaceous Tripolitania, SORRENTINO Bol. Soc. geol. ital. 51 2 1932 p. 191 pl. iv f. 1-5.—*N. (Cymatoceras) pseudoatlantis*, SHIMIZU 815.

†*Neocomites houdardi* sp. n., *N. h. tuberculata* var. n. Cretaceous France, ROMAN Trav. Lab. Geol. Lyon 22 19 1933 pp. 17, 19.—*N. nodosoplicatus*, *neocomiensiformis* figs., ROMAN 759.

†*Nomismoceras* N. of England, BISAT 104.

†*Oelandoceras* gen. n. type *haelludenense* sp. n. p. 170 pl. i f. 3 A, B text-figs. 6 A, B; *O. byrumense* p. 171 pl. ii f. 1 A, B text-fig. 4; *O. kristdalaense* p. 171 pl. ii f. 4 A, B, C text-fig. 5, Glauconite of Vaginatenskalk Europe, FOERSTE Ohio J. Sci. 32 3 1932.

†*Oncoceras*, *collinsi*, *tetrauvillense casei*, spp. n. dolomite Canada, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 pp. 110, 111, 113 pl. xxxi.

†*Ophiceras sinense* p. 8 pl. i f. 1-3; *tingi* p. 9 pl. i f. 4a-4e spp. n. Trias S. China, TIEN Palaeont. Sinica B 15 1933.

†*Oppeliidae* Callovien France, CORROY 199.

†*Ormoceras paquettense, josephianum husseyi*, O. ? *casei* spp. n. N. Amer. and Canada, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 18 1-3 1933 pp. 11-14 pls. xvii, xxxvii.

†*Orthoceras katuglåsense* sp. n. Ordovician Norway, A. F. FOERSTE Skr. Norske Vidensk.-Akad. Oslo 1932 4 1933 p. 152 pl. xxiv.—*Orthoceras*, KUTSCHER 470.—*O. kansasense* n. sp. [nom. nud.], SAYRE 780.

†*Otocellites* gen. n. type *Celtites perauritus* Dien., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Otoites reesidei* sp. n. Jurassic California, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5 1932 p. 912 pl. xxvii f. 9–11.

†*Oxynoticeras gardeti* p. 622 pl. xxxiv f. 1, 1a, *jolyi* p. 323 pl. xxxiv f. 2, 2a; *contanti* p. 625 pl. xxxiv f. 3, 3a; Lotharingien *corroyi* p. 627 pl. xxxiii, Pliensbachien France spp. n., C. GÉRARD Bull. Soc. geol. Fr. 5 1 8–9 1931.

†*Pachyproptychites* gen. n. type *Proptychites otoceratoides* Dien., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Pachydiscus manambolensis* p. 26 pl. iii f. 2–3, *besairiei* p. 29 pl. iii f. 4, 5, pl. iv f. 7, pl. xi f. 3 spp. n. Cretaceous Madagascar, E. BASSE Monog. Paléont. Cretace Mad. 1931 p. 26 pl. iii f. 2, 3.

†*Pachyteuthis explanatus*, V. N. OGNEV 606.

†*Palaeonutilus* (?) *broeggeri* sp. n. Ordovician Norway, A. F. FOERSTE Skr. Norske Vidensk. Akad. Oslo 1932 4 1933 p. 155 pl. xxv.

†*Papilliceras stantoni* p. 910 pl. xxix f. 1, 2, pl. xxxii f. 1, *blackwelderi* p. 911 pl. xxx f. 1–4, *juramontanum* p. 911 pl. xxxi Jurassic California, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5 1932.

†*Paquettoceras* gen. n. type *P. allumetense* sp. n. Black R. formation Canada, A. F. FOERSTE Denison Univ. Bull. Granville 33 3 J. Sci. Labs. 28 1–3 1933 p. 59 pl. xxviii.

†*Paradidymites* gen. n. type *Didymites* sp. indet. Waagen [? ergo nom. nud.], DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Paradistichites* gen. n. type *Distichites ectolicitiformis* Dien., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Parahauerites* gen. n. type *Hauerites ashleyi* Hyatt & Smith, DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Parahoplites yaegashii* sp. n. Cretaceous Japan p. 30 pl. ii f. 1–3, iii f. 1, 2; *P. germanicus* nom. nov. for *P. weissii* Uhlig & Neumayr's fig. über Amm. Hilsbild. N. deutsch. Pal. xxvii 1881 pl. xlvii f. 1a, SHIMIZU p. 31 Sci. Rep. Tôhoku Univ. 15 1 1931.

†*Paralegoceras evolutum, sundaicum, gigas, wanneri, tschernyschewi, australe*, MAREZ OYENS 635.—*P. jacksoni* geol. age, HOSKING 381.

†*Parapachydiscus parahybensis, dos-santosi, gettyi, euzebioi, arionis, albuquerquei, barsiliensis, reedsi, eurydice, orpheus, bruneti, williamsoni, sumneri, poseidon, endymion, hermes, athena, psyche, hera, perseus, oceanus* spp. n. Cretaceous Brazil, MAURY Monog. serv. geol. e min. Brasil 8 1930 pp. 133–165 pls.

†*Parapinacoceras* gen. n. type *Pinacoceras aspidoides* Dien., DIENER Centralb. Min. Geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Paroniceras sternale* Buch, s. *umbra* Renz, s. *tevantina* Renz; *P. sternale urbiana* var. n. Lias Central Apennines p. 165 pl. vii f. 7, 7a; *P. helveticum* Renz, h. *epirotica* Renz, h. *graeca* Renz, h. *morbiensis* Renz, *buckmani* Bonarelli figures, RENZ Ecl. geol. helv. 26 2 1933 pls. vi, vii.

†*Paroxynoticeras salisburgense*, C. GÉRARD 316.

†*Peltoceras riasi mongenotensis* var. n. p. 49 pl. v f. 14, 14a; *P. ? pseudolorioli* sp. n. p. 50 pl. v f. 15, 15a, Oxfordien France, MAIRE Bull. Soc. géol. Fr. 5 2 1–2 1932.

†*Perisphinctes rossicus, mosquensis graecus, crouzentensis*, figs., MAIRE 519.—*P. fig.*, H. FIEBOLD 296.

†*Permonutilus* gen. n. type *P. cornutus* Golowkinsky p. 189 pl. i, ii, iii; *P. pinegaensis* sp. n. p. 196 pls. i f. 7–8, ii f. 1, 3, 11; *P. kargowskensis* sp. n. p. 200 pls. i f. 10, 11 ii f. 7–11, Permian Russia, Trav. Inst. Geol. Acad. Sci. U.R.S.S. 3 1933.

†*Perrinites bösei* sp. n. (Plummer & Scott M.S.) Permian Texas, SELLARDS Bull. Univ. Texas 3232 Geol. Texas 1 pt. 1 1933 p. 238 pl. vi f. 8–10.

†*Pervinquieria spathi, gregoryi spathi*
"var. nov." *europaea*, THIELE 887.

†*Phylloceras burckhardti* sp. n. Jurassic California, CRICKMAY Bull. Geol. Soc. Amer. Washington D.C. 44 5 1932 p. 908 pl. xxvi ff. 6, 7.—*P. cylindricum* (non Sow.) = *Procladiscites fucinii* n.f., REGNY 732.—*P. cylindricum* fig., REGNY 733.—*P.* Cretaceous Mexico, MUELLERED 579.

†*Phymatoceras evolutum* p. 29, *P. pulcher* p. 30 pl. iii f. 1, 2, 6, *anomalum* p. 31 pl. iii f. 5, 10, *crassicosta* p. 31 pl. iii f. 11, *caroli* p. 32 pl. iii f. 3, 4; spp. n. Univ. Pisa Coll. Permian Europe, MERLA Palaeont. ital. Siena 33 (N.S. 3) 1932 (1933).

†Pinacitinae (Hyatt) subfam. n. em Pinnacitinae Hyatt 1900 type gen. *Pinacites* Mojs., SCHNDEWOLF Abh. preuss. geol. LdAnst. 148 1933 p. 99.

†*Pinacoplacites* gen. n. type *Placites meridianus* Welter, DIENER Centralb. Min. geol. u. Paläont. Stuttgart March 1916 5 p. 101.

†*Plagioptychus arnaudi, toucasi*, MUELLERED 578.

†*Platystomaceras* (gen. n. 1931) p. 101; *P. vesaignensis* p. 102 pl. v f. 1-2; *jacobi* p. 103 pl. v f. 5-6, *cuenoti* p. 104 pl. v f. 3, 4; spp. n. Callovien France, CORROY Mem. Carte Geol. Fr. 1932.

†*Plectoceras carletonense* sp. n. dolomite Canada, A. F. FOERSTE Denison Univ. Bull. Granville Ohio 33 3 J. Sci. Labs. 28 1-3 1933 p. 123 pl. xxxvi.

†*Pleurocephalites besairiei* nom. nov. = *M[acrocephalites] elephantinus* Le-moine non Sowerby pars, SPATH Palaeont. Indica N.S. 9 2 1933 p. 821.

†*Pleuromitris subquadrangulus* sp. n. Trias S. China, TIEN Palaeont. sinica B 15 1933 p. 37 pl. iv f. 11 a-b.—*P. nodosostriatus* p. 25 pl. iv f. 1, *ornatissimus* p. 26 pl. iv f. 2 spp. n. Carboniferous N. China, T. H. YIN Palaeont. Sinica B 11 3 1933.

†*Polygrammoceras carinatum* p. 17 pl. ii f. 4, pl. v f. 6 Alsarbyn, *ölandicum* p. 20 pl. i f. 3, 11, pl. vi f. 8, pl. vii f. 2-4 Öland, spp. n. Upper Grey Limestone, TROEDSSON Acta. Univ. lund 28 6 1932.—*P. bipartitum* p. 23 pl. i f. 5-10, pl. vi f. 5, 6, *densestriatum* p. 24 pl. ii f. 2, 3, pl. vi f. 1 text-fig.,

simplex p. 25 pl. i f. 2, pl. iv f. 5, pl. vii f. 5, *fontis* p. 26 pl. vii f. 6, *endocerooides* p. 30 pl. iii f. 2, 3, pl. iv f. 6 spp. n. limestone Öland, TROEDSSON Acta Univ. lund 28 6 1932.

†*Potyptychites bidichotomus* fig., ROMAN 759.

†*Procerites (Sivajiceras) anolensis* sp. n. Lower Oolite Somali, STEFANINI Palaeont. ital. 32 Suppl. p. 28 pl. ii [x] f. 1, v [xiii] f. 3.

†*Procladiscites fucinii* sp. n. Trias Italy, REGNY Bol. Soc. geol. ital. 52 1 1933 p. 187 pl. xi f. 7, 9 and text-fig.—*P. c. fr. fucinii* fig., REGNY 733.

†*Prolecanitidae*, BISAT 104.

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IX. CRUSTACEA

ARRANGED BY

W. L. SCLATER, M.A.

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Callinectes platei sp. n. off Tuticorin India, CHEN Jena Z. Naturw. 68 p. 95 figs.

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†*Heteropanope ? wylliei* sp. n. Miocene Persia, GLAESSNER Ann. Mag. N.H. (10) 12 p. 10 figs.

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Hexapanopeus rubicundus sp. n. G. of California, RATHBUN Proc. Biol. Soc. 46 p. 148.

Kraussia laevis sp. n. Japan Seas, YOKOYA J. Coll. Agr. Tokyo 12 p. 170 figs.

†*Lobocarcinus indicus* sp. n. Eocene Baluchistan, GLAESSNER Ann. Mag. N.H. (10) 12 p. 14 figs.

†*Montezumella rutteni* sp. n. Eocene Bonaire, W.I., v. STRAELEN Bull. Mus. N.H. Belge 9 no. 23 p. 3 fig.

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†*Pseudorhombila patagonica* sp. n. Miocene, Argentina, GLAESSNER Ann. Mag. N.H. (10) 12 p. 24 figs.

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†*Scylla batallieri* sp. n. Miocene Catalonia, VIA Butll. Inst. catal. 32 p. 138.—*S. ozawai* sp. n. Miocene Japan, GLAESSNER Ann. Mag. N.H. (10) 12 p. 20 figs.

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Cleistostoma mcneilli sp. n. Queensl. coast, WARD Aust. Zool. 7 p. 390 figs.

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†*Laeviprosopon* gen. n. for *Prosopon laeve* v. Mayer, GLAESSNER Cbl. Min. Geol. Pal. 1933B p. 180.

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X. ARACHNIDA

TO WHICH ARE ADDED

ARTHROPOD GROUPS

OTHER THAN

INSECTA AND CRUSTACEA.

[GIGANTOSTRACA (XIPHOSURA, SYNXIPHOSURA, EURYPTERIDA, TRILOBITA), PANTOPODA, TARDIGRADA, PENTASTOMIDA, MYRIOPODA, AND PROTOTRACHEATA.]

ARRANGED BY

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†*Griffithides olsoni* sp. n. Carboniferous. United States p. 431 figs., WILLIAMS J. Wash. Acad. Sci. 23. -

†*Haniwa* gen. n. [*Ophisthoparia* of uncertain systematic position] p. 147 for type *H. sosanensis* p. 148 pl., *H. quadrata* p. 149 pl. spp. n. Upper Cambrian, Manchuria, KOBAYASHI Jap. J. Geol. Tokyo 11.

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Küenthal & Krumbach, Handbuch der Zoology, ZACHER 470.

XI. INSECTA

BY

THE IMPERIAL INSTITUTE OF ENTOMOLOGY

FOREWORD

THE attention of readers is directed to the fact that owing to the necessity of keeping the "Insecta" part within reasonable limits, entomological papers written entirely from an economic standpoint are omitted, but abstracts of these will be found in the *Review of Applied Entomology*. Very brief systematic papers, usually those dealing only with a single species, are noticed in the systematic portion only and do not appear in the list of titles.

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Fiji. *Coleoptera*: KLEINE, *Schizotrachelus* sp. n., 1500; VAN ZWALUWENBURG, new Elateridae, 2994, 2996.—*Hymenoptera*: FERRIÈRE, new Chalcids, 842.—*Lepidoptera*: COLLENETTE, *Aedoneura* gen. et sp. n. (Lyman.), 560; MEYRICK, new Pyralids, Tineids, Tortricids, 1964; PROUT, *Simplicia* sp. n. (Noct.), 2372.

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Marquesas Is. *Insecta*: MUMFORD & ADAMSON, review of insect fauna, 2059.—*Coleoptera*: BLAIR, new spp., 276; VAN DYKE, new Curculionidae, 2985,

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MÜLLER-RUTZ, Microlepidoptera of Switzerland, 6th suppl., 2057; NIEŚCIOŁOWSKI, Macrolepidoptera of Tatra Mts., 2139a; OUDEMANS, Rhopalocera of Netherlands compared with those of Gr. Britain and Ireland, 2195; SIMONDETTI, Gran Paradiso, N.W. Italy, 2700; SZULCZEWSKI, Microlepidoptera, Poznan, Poland, 2823.—*Neuroptera*: NAVÁS, Myrmeleonids of Belgium, key, 2096.—*Diptera*: COLLART, Stratiomyidae, Belgium, 554; CZIZEK, Cyindrotominae and Limoniinae (Tipulid.), Moravia, 642; DRENSKY, Oestridae, Bulgaria, 734; GOETGHEBUER, Ceratopogonidae, Belgium, catalogue, 999; GOETGHEBUER & MARÉCHAL, Phoridae, Belgium, 1003; KRUSEMAN, Chironomidae, Holland, 1572; LANDROCK, Tabanidae, Moravia, revision, 1628, *Mycetophila*, Moravia and Silesia, revision, 1629; RYBINSKY, mosquitos of N.W. Ukraine, 2516; WENGENMAYR, Bavaria, 3096.—*Odonata*: BEZVALI, Bessarabia, list, 263; MAY, Germany, revision, 1921.—*Hemiptera*: ALFKEN, Heteroptera of Bremen dist., list, 37; BEZVALI, Bessarabia, list, 262; GUILLEAUME, Belgium, additions, 1053; GUILLEAUME & VREURICK, Belgium, additions, 1055; HAINMÜLLER, Mecklenburg, 1077; JACZEWSKI, Heteroptera new to Poland (II), 1365; KIRICHENKO, *Aphelochirus* (Nauc.), Russia, list, 1482; LERMA, Trentino, 1678; NAST, Cercopinae, distribution of Centr. European, 2086; SCHUMACHER, Heteroptera of Lower Elbe, list, 2609; STICHEL, Capsidae of Germany, keys, 2788.—*Dermaptera*: SALFI, Gran Paradiso, N.W. Italy, 2528.—*Orthoptera*: MÜLLER, Dobruja and Bessarabia, 2047; SALFI, Gran Paradiso, N.W. Italy, 2528; TÁBORSKÝ, Czechoslovakia, 2824; TESLINSKY, Bessarabia, list, 2853.

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Insecta: RILEY, insects of the Lybian Desert, Geogr. J., London 82 1933 pp. 225–226; VILARRÚBIA & ESPAÑOL, Minorca, 3011.—*Coleoptera*: DODERO, Gran Paradiso Park, N.W. Italy, 712; FUENTE Y MORALES, Spain and Balearic Is., additions, 927; GALIBERT, Agout (Tarn) Basin, 944; GRIDELLI, Staphylinidae, Italy, preliminary key, 1037, Tenebrionidae, Dancalia, 1038, Coleoptera, Kufra Oasis, 1039; MÜLLER, Histeridae,

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Insecta: SCOTT, conclusions regarding insect fauna of Seychelles and adjacent Is., 2624.—*Neuroptera*: KIMMINS, *Notiobiella* sp. n., 1472.

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Coleoptera: JANSSENS, *Chalcosoma* (Dynast.), monograph, 1388; SPAETH, *Hoplionota* (Cass.), key, 2757.—*Lepidoptera*: CORBET & PENDLEBURY, *Eurema* (Pier.), revision, 589; GAEDE, Cossidae, Indarbelidae, Aegeriidae, revision, 939; PFITZNER & GAEDE, Hepialidae, revision, 2270; PROUT, Geometridae, 2374.—*Odonata*: FRASER, *Orolestes*, revision, 910.

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nat. Belg. 9 no. 20.—*C. cornutus*, *pulchritarsis* spp. n. Barro Colorado I. p. 167 figs., VAN DUZEE Bull. Amer. Mus. n.H. 51 1931.

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Uromesitius gen. n. p. 116, *caudatus* sp. n. Baltic Amber p. 117 figs., BRUES t.c.

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Aphidius microphthalmus, macrophthalmus spp. n. Baltic Amber p. 108 fig., BRUES Bernsteinforsch. 3.

Ascogaster pinicola p. 52, *dilatata* p. 53, *gracilicornis, praevolans* p. 54, *pentagona* p. 55, *robusta* p. 56, *sylvestris, submersa* p. 58, spp. n. Baltic Amber figs., BRUES t.c.

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Blacus crassicornis, grandior p. 83, *fritschii* p. 84, *andreei* p. 85, spp. n. Baltic Amber, BRUES t.c.

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Coeloreuteus resinae, gracilior spp. n. Baltic Amber p. 41 figs., BRUES t.c.

Digastrotheca gen. n., *mirabilis* sp. n. Baltic Amber p. 39 fig., BRUES t.c.

Diodontogaster gen. n., *bidentata* sp. n. Baltic Amber p. 59 fig., BRUES t.c.

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Electroblacus gen. n. p. 85, *facialis* sp. n. Baltic Amber p. 86 fig., BRUES t.c.

Electrohelcon gen. n. p. 62, *grandis* (type), *minor* p. 63, *foveatus* p. 64, spp. n. Baltic Amber figs., BRUES t.c.

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Gymnoscelis klebsi sp. n. Baltic Amber p. 67, BRUES t.c.

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Microtypus longicaudatus, *laeviusculus* p. 74, *longicornis* p. 75, *tenebrator*, *brevicornis* p. 76, *verticalis* p. 77, *triangulifer*, *obliquus* p. 78, *latipennis* p. 80, spp. n. Baltic Amber figs., BRUES t.c.

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Semirhytus caudatus sp. n. Baltic Amber p. 48, BRUES t.c.

Snellenius succinalis sp. n. Baltic Amber p. 95, BRUES t.c.

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Hexerites gen. n. (Thyrididae), *primalis* sp. n. Eocene Colorado p. 480 fig., COCKERELL Amer. Nat., New York 67.

Trichoptera and Paratrachoptera.

Liassophilidae fam. n. p. 55, TILLYARD Fossil Ins. no. 3 London 1933.

Liassophila gen. n. (Liassophilidae), *hydromanicoides* sp. n. Lias Warwickshire p. 56 figs., TILLYARD t.c.

Necrotaulius furcatus Gieb. (= *liasina* Gieb.) p. 62; *westwoodi* p. 64, *stigmaticus* p. 65, *apicalis*, *pygmaeus* p. 66, spp. n. Lias England figs., TILLYARD t.c.

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Actinophlebia anglicana sp. n. Lias Gloucestershire p. 14 fig., TILLYARD Fossil Ins. no. 3 London 1933.

Archisialidae fam. n. p. 75, MARTYNOV Trav. Inst. paléozool. Acad. Sci. U.R.S.S. 2.

Archisialis gen. n. (Archisialidae), *praecox* sp. n. Permian, Archangel p. 75 fig., MARTYNOV t.c.

Eopsychops gen. n. (Palaemeroibiidae) p. 69, *sojanensis* sp. n. Permian, Archangel p. 70 fig., MARTYNOV t.c.

Megapolystoechus gen. n. (Prohemeroibiidae) p. 11, *magnificus* sp. n. Lias Worcestershire p. 12 fig., TILLYARD Fossil Ins. no. 3 London 1933.

Permegalomus maculipennis sp. n. Permian, Archangel p. 65 fig., MARTYNOV Trav. Inst. paléozool. Acad. Sci. U.R.S.S. 2.

Permithonopsis gen. n. (Palaemeroibiidae), *ivensis* (type) p. 67, *proxima* p. 68, spp. n. Permian, Archangel figs., MARTYNOV t.c.

Permosialis bifasciata sp. n. Permian, Archangel p. 74 fig., MARTYNOV t.c.

Permosisyridae fam. n. p. 71, MARTYNOV t.c.

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Classification of Permian Mecoptera, MARTYNOV Trav. Inst. paléozool. Acad. Sci. U.R.S.S. 2 p. 53.

Agetochorista gen. n. (Mesochoristidae) p. 24, *ornata* (type) p. 25, *umbrata* p. 26, *fasciata* p. 27, *splendida* p. 28, *dubia*, *reducta* p. 31, spp. n. Permian, Archangel figs., MARTYNOV t.c.

Idelopanorpa gen. n. (Idelopanorpidae), *elegans* sp. n. Permian, Kama p. 192 figs., ZALESSKY Bull. Soc. géol. Fr. (5) 2 1932.

Kamopanorpa rotundipennis sp. n. Permian, Archangel p. 47 figs., MARTYNOV Trav. Inst. paléozool. Acad. Sci. U.R.S.S. 2.

Liassochorista gen. n. (Permochoristidae) p. 21, *anglicana* sp. n. Lias Warwickshire p. 22 figs., TILLYARD Fossil Ins. no. 3 London 1933.

Oochorista gen. n. (Mesochoristidae), *gunderseni* sp. n. Permian, Archangel p. 32 figs., MARTYNOV Trav. Inst. paléozool. Acad. Sci. U.R.S.S. 2.

Orthophlebia liassica Mant. (= *communis* Westw.) from *Panorpa* p. 35; *pictipennis* p. 40, *gigantea* p. 42, *brodiei* p. 43, spp. n. Lias England figs., TILLYARD Fossil Ins. no. 3 London 1933.

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Parachorista opposita sp. n. Permian, Archangel p. 41 fig., MARTYNOV Trav. Inst. paléozool. Acad. Sci. U.R.S.S. 2.

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Permocentropus gen. n. (Permocentropidae), *philopotamoides* sp. n. Permian, Archangel p. 49 figs., MARTYNOV t.c.

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Protorthophlebia gen. n. (Orthophlebiidae) p. 28, *latipennis* sp. n. Lias Warwickshire p. 29 fig., TILLYARD Fossil Ins. no. 3 London 1933.

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List of Diptera from the diluvial clay of Starunia, LANGERSDORFF C.R. Acad. Cracovie 1933 no. 9 pp. 5-6.

Liassotipula gen. n. (Architipulidae) p. 74, *anglicana* sp. n. Lias Gloucestershire p. 75 fig., TILLYARD Fossil Ins. no. 3 London 1933.

Hemiptera and Palaeohemiptera.

Hemiptera of lower Permian, Kansas and evolution of Homoptera, CARPENTER Proc. Amer. Acad. Arts Sci. 68 pp. 435-443, 4 figs.

Systematic position of Archescytinidae discussed, MARTYNOV Bull. Acad. Leningrad 1933 pp. 890-894.

Ivascytina gen. n. (Archescytinidae) p. 888, *difficilis* sp. n. Permian, Archangel p. 889 fig., MARTYNOV Bull. Acad. Leningrad 1933.

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Lithoscytina gen. n. (Lithoscytinidae), *cubitalis* sp. n. lower Permian, Kansas p. 436 fig., CARPENTER t.c.

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Idelopsocus gen. n. (Dinopsocidae), *tataricus* sp. n. Permian, Kama p. 190 figs., ZALESSKY Bull. Soc. géol. Fr. (5) 2 1932.

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Permopsocus latipennis lower Permian, Kansas further description p. 449, CARPENTER t.c.

Progonopsocus permianus lower Permian, Kansas further description p. 449, CARPENTER t.c.

Isoptera.

Revision of fossil Termopsinae, EMERSON Univ. Calif. Pub. Ent. 6 pp. 165-196, 40 figs.

Hodotermes coloradensis see *Zootermopsis*.

Parotermes hageni see *Prokalotermes*.

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Zootermopsis gen. n., *Hodotermes coloradensis* Scudd. transferred to p. 187 fig., EMERSON t.c.

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Plectoptera of lower Permian, Kansas, CARPENTER Proc. Amer. Acad. Arts Sci. 68 pp. 487-501, 4 figs.

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Orthoptera and Protorthoptera.

List of Orthoptera from the diluvial clay of Starunia, ZEUNER C.R. Acad. Cracovie 1933 no. 9 pp. 6-7.

Crocooblattina gen. n. (Archimy-lacridae), *brückneri* sp. n. Thuringia p. 44 figs., GUTHÖRL Jber. oberrhein. geol. Ver. (n.f.) 22.

Ideloblatta gen. n. (Ideloblattidae), *rossica* sp. n. Permian, Kama p. 185 figs., ZALESSKY Bull. Soc. géol. Fr. (5) 2 1932.

Kamaites gen. n. (Protorthoptera), *mirabilis* sp. n. Permian, Kama p. 189 figs., ZALESSKY t.c.

Jurina gen. n. (Protorthoptera, Jurinidae), *scutulata* sp. n. Permian, Kama p. 202 figs., ZALESSKY t.c.

Pachytylopsis (Protorthoptera) *corneli* sp. n. Belgium p. 138 fig., PRUVOST Ann. Soc. sci. Bruxelles, Louvain (B) 53.

Prothymen permianus, *elongatus* p. 424 further descriptions; *readi* sp. n. p. 425 lower Permian, Kansas figs., CARPENTER Proc. Amer. Acad. Arts Sci. 68.

Sysciolata gen. n. (Spiloblattinidae), *doni* sp. n. Bavaria p. 47 figs., GUTHÖRL Jber. oberrhein. geol. Ver. (n.f.) 22.

Tomacblatta gen. n. (Archimy-lacridae), *baschkirica* sp. n. Permian, Kama p. 184 figs., ZALESSKY Bull. Soc. géol. Fr. (5) 2 1932.

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Asthenohymen dunbari p. 428, *pusillus* p. 429, *affinis* p. 430 lower Permian,

Kansas further descriptions fig., CARPENTER t.c.

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Acosmelytron (Blattelytridae) *elongatum*, *delicatum* lower Permian, Kansas further descriptions p. 481, CARPENTER t.c.

Archelytridae fam. n. p. 477, CARPENTER t.c.

Archelytron gen. n., *superbum* sp. n. lower Permian, Kansas p. 477 fig., CARPENTER t.c.

Elytroneuridae fam. n. p. 478, CARPENTER t.c.

Elytroneura gen. n. p. 478, *permiana* sp. n. lower Permian, Kansas p. 479 fig., CARPENTER t.c.

Megelytridae fam. n. p. 476, CARPENTER t.c.

Parablattelytron (Blattelytridae) *latum* sp. n.; *subincisum* p. 482, *rectum* p. 483 further descriptions lower Permian, Kansas fig., CARPENTER t.c.

Permelytropis gen. n. (Protelytridae) p. 474, *cubitalis* sp. n. lower Permian, Kansas p. 475 fig., CARPENTER t.c.

Protelytron (Protelytridae) *permi-anum* further description p. 467; *tillyardi* p. 473, *angustum* p. 474, spp. n. lower Permian, Kansas figs., CARPENTER t.c.

ERRATA.

Vol. liii, 1916, p. 159, 2nd col., for "*Wickmannia*" read "*Wickmannia*" and "p. 2" read "p. 28"

Vol. lvii, 1920, p. 230, 1st col., 2 lines from end, for "*heptachalea*" read "*heptachalca*" and insert p. 326.

Vol. lix, 1922, p. 58, no. 1237, and p. 250, 2nd col., under *Derocrepis* add "Sep. from Münch. kol. Z. 4 1922 pp. 271-343."

Vol. lxi, 1924, p. 280, 2nd col., 17 lines from end, for "(Rhyacophilidae)" read "(Sericostomatidae)" and 15 lines from end, for "p. 319" read "p. 310"

Vol. lxi, 1924, p. 281, 1st col., after *Synchorema* insert (Rhyacophilidae) and under *Zelandoptila* for "(Rhyacophilidae)" read "(Hydroptilidae)"

Vol. lxii, 1925, p. 317, 2nd col., transfer *Xana* to ENCYRTIDAE.

Vol. lxii, 1925, p. 359, 1st col., for "*Rhynchodexia*" read "*Rhynchiodexia*"

Vol. lxii, 1925, p. 369, 1st col., for "*Penicillida*" read "*Penicillidia*"

Vol. lxiii, 1926, p. 216, 2nd col., for "*Gasterocerus*" read "*Gasterocercus*"

Vol. lxiii, 1926, p. 232, 1st col., for "*Probatus*" read "*Probatius*"

Vol. lxiv, 1927, p. 246, 1st col., for "*Prothymnia*" read "*Prothymia*"

Vol. lxiv, 1927, p. 277, 2nd col., transfer *Trachybyrsis* to TORTRICIDAE and for "*Xylorictidae*" read "*Phaloniidae*"

Vol. lxv, 1928, p. 241, 1st col., transfer "*Coenomyia*" to COENOMYIIDAE.

Vol. lxvi, 1929, p. 245, 2nd col., for "*Callione*" read "*Calliona*"

Vol. lxvii, 1930, p. 203, 1st col., for "*Cistellina*" read "*Cistelina*"

Vol. lxvii, 1930, p. 230, 1st col., transfer *Stenomela* to EUMOLPIDAE.

Vol. lxvii, 1930, p. 241, 1st col., 5 lines from end, should read "*melathalia* sp. n. (with ff. n. *aureliaesimilis*, *dictynmaesimilis*, *postmelathalia*, *parvaurelia*, *aurelioides*); *helvetica* subsp. n. *divergens* (with ff. n. *maximaeformis*, *post-divergens*, *partheniaesimilis*)"

Vol. lxvii, 1930, p. 325, 1st col., line 2, for "Metamorphosis of Culicidae" read "Metamorphosis of Tipulidae"

Vol. lxvii, 1930, p. 342, 1st col., for "*Aphrostylus*" read "*Aphrosylus*"

Vol. lxvii, 1930, p. 362, 2nd col., for "*Metapobrachia*" (also 18 lines from end) read "*Metopobrachia*"

Vol. lxvii, 1930, p. 381, transfer *Sehirus* to CYDNIDAE.

Vol. lxviii, 1931, p. 50, no. 978, p. 99, no. 2103, p. 283, 1st col., 12 lines from end, p. 291, 2nd col., line 19, p. 292, 1st col., line 18, p. 294, 2nd col., line 8 and p. 326, 1st col., line 13, for "41" read "21"

Vol. lxviii, 1931, p. 87, no. 1823, for "no. 1" read "no. 2"

Vol. lxviii, 1931, p. 241, 2nd col., transfer *Euryope* to EUMOLPIDAE.

Vol. lxviii, 1931, p. 281, 2nd col., 23 lines from end before "*variabella*" insert "*varia* r. n." and next line, before "*nigroobscura*" insert "*parthenie* rr. n."

Vol. lxviii, 1931, p. 282, 2nd col., line 16, for "*aquilina*" read "*aquila*"

Vol. lxviii, 1931, p. 283, 2nd col., line 22, for "*gorgano*" read "*gargano*"; the entry under "*Maculinea*" should read "*Maculinea coeligena* subsp. *pratti* p. 329; *coelestis* subsp. n. *dubernardi* China p. 330"; *pictionensis* entry should be transferred to *Uranops*.

Vol. lxviii, 1931, p. 284, 2nd col., 2 lines from end, for "Belgium" read "Pyrenees"

Vol. lxviii, 1931, p. 285, 1st col., transfer *Leptosia velocissima* to NOCTUIDAE.

Vol. lxviii, 1931, p. 286, 2nd col., line 24, for "p. 8" read "p. 9"

Vol. lxviii, 1931, p. 299, 1st col., for "*Spatala*" read "*Spatalia*"

Vol. lxviii, 1931, p. 308, 1st col., for "*Chalcoscelis*" read "*Chalcocelis*"

Vol. lxix, 1932, p. 112, no. 2388, and p. 162, 1st col., line 16, for "Przibram, H." read "Suster, P. M."

Vol. lxix, 1932, p. 146, no. 3154, for "Soc." read "Sci."

Vol. lxix, 1932, p. 174, 1st col., line 14, for "insects" read "instincts"

Vol. lxix, 1932, p. 194, 2nd col., for "*Diplochella*" read "*Diplocheila*"

Vol. lxix, 1932, p. 205, 2nd col., transfer *Pedilophorus* to BYRRHIDAE.

Vol. lxix, 1932, p. 213, 1st col., for "*Ommadius*" read "*Omadius*"

Vol. lxix, 1932, p. 217, 1st col., for "*Conoderes*" read "*Conoderus*"

Vol. lxix, 1932, p. 223, 1st col., transfer *Donaldia* to DASYTIDAE.

Vol. lxix, 1932, p. 253, 2nd col., for "*Pseudepitrix*" read "*Pseudoepitrix*"

Vol. lxix, 1932, p. 264, 2nd col., transfer *Stizus* to SPHEGIDAE.

Vol. lxix, 1932, p. 287, 2nd col., line 31, for "Switzerland" read "Lettland" and 3 lines from end, for "Miller" read "Müller"

Vol. lxix, 1932, p. 290, 1st col., line 1, after "*mayae*" insert "p. 279" and line 17, after "*eminens*" insert "Pyrenees"

Vol. lxix, 1932, p. 294, 1st col., for "*Emartugina*" read "*Ematurgina*" and for "*Phaenochitona*" read "*Phaenochitonina*"

Vol. lxix, 1932, p. 296, 1st col., line 26, for "*lygus*" read "*argus*" and line 36, delete "*mithridates* subsp."

Vol. lxix, 1932, p. 299, 2nd col., line 6, for "*scholzi*" read "*schulzi*"; and 15 lines from end after "*tosawei*" insert "Formosa"

Vol. lxix, 1932, p. 301, 1st col., transfer *mnemosyne* et sqq. from *Tadumia* to *Parnassius*.

Vol. lxix, 1932, p. 302, 1st col., 23 lines from end, should read "*tenuis* p. 413; *zina* China p. 415, *confusa*"

Vol. lxix, 1932, p. 303, 2nd col., line 16, for "p. 353" read "p. 383"

Vol. lxix, 1932, p. 308, 1st col., for "*Chrysopteron*" read "*Chrysoptera*" and transfer *Cymatophora* to THYATIRIDAE.

Vol. lxix, 1932, p. 311, line 21, for "var. n." read "subsp. n."

Vol. lxix, 1932, p. 323, 2nd col., transfer *Selenis* to NOCTUIDAE.

Vol. lxix, 1932, p. 328, 2nd col., transfer *Amicta* to PSYCHIDAE.

Vol. lxix, 1932, p. 371, 1st col. for "*Neurogona*" read "*Neurigona*"

Vol. lxix, 1932, p. 416, 2nd col., transfer *Zorotypus* to ZORAPTERA after PLECOPTERA.

XII. PROTOCHORDATA

INCLUDING

ENTEROPNEUSTA AND PTEROBRANCHIA

BY

M. BURTON, M.Sc.

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†*Cyrtaspis papillatus* p. 306 pl. xv figs. 1-2, *sculptus* p. 306 pl. xvi figs. 1-2, *falcatus* p. 307 pl. xvii fig. 1 spp. n., *ovatus* figd., Devonian U.S.A., BRYANT Proc. Amer. Phil. Soc. Philad. **72**.

†*Drepanaspis schrielei* sp. n. Devonian Germany, GROSS Zeitschr. deutsch. Geol. Ges. Berlin **84** 1932 p. 572; *D. gemuendenensis* figd., GROSS **283**.

†*Ganosteus tuberculatus* figd., GROSS **282**.

†*Megaloplax* gen. n. p. 110 type *Palaeoteuthis marginalis* Eichwald, OBRUTSCHIEW Trav. Inst. Paleozool. Acad. Sci. U.R.S.S. **2**.

†*Palaeaspis simionescui* sp. n. Silurian Roumania, VASCĂUTANU Anu. Inst. geol. Roman. Bucuresti **15** 1931 p. 474.

†*Paraplesiobatis* gen. n., *heinrichsi* sp. n. Devonian Germany, BROILI SitzBer. bayer. Akad. Wiss. **1933** p. 286 pl. vi text-figs. 6-7.

†*Protaspis* gen. n., *brevirostris* p. 297 pl. viii figs. 1-2, *nanus* p. 298 pl. ix figs. 1-2, *amplus* p. 299 pl. x text-fig. 3, *perlatus* p. 300 pl. xi text-fig. 4, *perryi* p. 302 pl. xii figs. 1-2, *cingulus* p. 303 pl. xiii fig. 1, *constrictus* p. 303 pl. xiii fig. 2 spp. n., *bucheri, dorfi* figd., Devonian U.S.A., BRYANT Proc. Amer. Phil. Soc. Philad. **72**.

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†*Psammosteus maeandrinus, megalopteryx, serrulatus* figd., GROSS **282**.

†*Pteraspis smith-woodwardi* sp. n. Devonian Germany, BROILI SitzBer. bayer. Akad. Wiss. **1933** p. 10 pl.; *P. rotunda* sp. n. Devonian Germany, GROSS Zeitschr. deutsch. Geol. Ges. Berlin **84** 1932 p. 572; *P. major latifrons* var. n. Silurian Roumania, VASCĂUTANU Anu. Inst. geol. Roman. Bucuresti **15** 1931 p. 474.

†*Pycnosteus palaeformis* figd., GROSS **282**.

†*Weigeltaspis* gen. n., *alta* sp. n. Devonian Poland, BROTZEN Cbl. Min. Geol. Paläont. Stuttgart **12** p. 648 figs. 1-2.

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†*Paleospondylus* discussion, AYERS **23**.

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†*Stensioella* gen. n., *heintzi* sp. n. Devonian Germany, BROILI SitzBer. bayer. Akad. Wiss. **1933** p. 299 pls. iii-iv text-figs. 8-11.

†RHENANIDA.

†*Gemuendina stuerzi* sp. n. Devonian Germany, BROILI SitzBer. bayer. Akad. Wiss. **1933** p. 272 pls. i-ii text-figs. 1-3.

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†*Ancistriodus* gen. n., *multisectus* (= *serratus* in explanation to plate ?) sp. n. Permian U.S.A., BRANSON J. Geol. Chicago **41** p. 177.

†*Dolophonodus* gen. n. p. 175, *uncinatus* sp. n. p. 176 pl. i figs. 1-4, Permian U.S.A., BRANSON J. Geol. Chicago 41.

†*Hamatus phosphoriensis* figd., BRANSON 92.

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†*Phlebolepis elegans* figd., HOPPE 343.

†*Rapidenticthys* gen. n., *uncinatus* sp. n. Permian U.S.A., BRANSON Bull. Geol. Soc. Amer. 43 1932 p. 284.

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†*Gyracanthus convexus* sp. n. Devonian Germany, GROSS Zeitschr. deutsch. Geol. Ges. Berlin 84 1932 p. 572.

†*Traquairichthys* nom. n. type *Acanthodes pygmaeus* (= *Traquairia* Fritsch nec Carruthers), WHITLEY Copeia 1933 p. 146.

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†*Lamna serra* figd., MAURY 467.

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Carcharinus latistomus sp. n. China, FANG & WANG Contr. Biol. Lab. Sci. Soc. China Nanking Zool. Ser. 8 1932 p. 235 fig. 9.

†*Eugaleus latus* figd., WEILER 755a.

†*Galeocерdo aduncus* figd., PIVETEAU 581.

†*Hemipristis serra* figd., PIVETEAU 581.

†*Hypoprion reisi* sp. n. (= *H. cf. singularis* Reis 1895) Oligocene Germany, WEILER N. Jahrb. Min. 68 B 1932 p. 309.

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†*Janassa sulcatus* figd., MOY-THOMAS 499; *J. unguicula* figd., BRANSON 92.

†*Petalodus ornatus* figd., MOY-THOMAS 499.

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†*Psephodus minutus* figd., MOY-THOMAS 499.

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†*Campodus variabilis* figd., BRANSON 92.

†*Otenacanthus mutabilis* sp. n. Permian U.S.A., BRANSON J. Geol. Chicago 41 p. 180 pl. i figs. 13-14; *C. jaekeli* p. 64 pl. xi fig. 9, *gemuendensis* p. 64 pl. xi fig. 8 spp. n. Devonian Germany, GROSS Abh. preuss. geol. LdAnst. 154.

†*Edestus newtoni* figd., BROMEHEAD, EDWARDS, WRAY & STEPHENS 102.

†*Fayolia* notes, CROOKALL 159.

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†*Pristis priemi* p. 362, pl. xxiii fig. 1, *wateleti* p. 362 pl. xxiii fig. 2, *imhoffi* p. 363 pl. xxiii fig. 3 spp. n. Eocene France, LERICHE Bull. Soc. géol. Fr. 2 1932.

†*Schizorhiza weileri* sp. n. Cretaceous Africa, SERRA Riv. ital. Pal. 39 1933 p. 107 pl. iii.

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Dasybatis uylenburgi sp. n. East Indies, GILTAIY Mém. Mus. Roy. H.N. Belg. Hors Sér. 5 (3) p. 13 figs. 3-6.

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†*Myliobatis bellardii* figd., LERICHE 421, 422.

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†*Rhynchodus major*, *tetrodon* figd., GROSS 283.

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†*Goniosteus* gen. n., *gerolsteinensis* sp. n. Devonian Germany, GROSS Abh. preuss. geol. LdAnst. 154 p. 49 pl. v fig. 6.

†*Tropidosteus* gen. n., *curvatus* sp. n. Devonian Germany, GROSS t.c. p. 50 figs. 14 B-D.

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†*Anomalichthys magnus* sp. n. Devonian Germany, GROSS Abh. preuss. geol. LdAnst. 154 p. 42 pl. vi fig. 4 text-fig. 11.

†*Aspidichthys ingens* figd., GROSS 283.

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†*Dinichthys oviformis* sp. n. Devonian Germany, GROSS Abh. preuss. geol. LdAnst. 154 p. 31 pl. vii fig. 1, pl. viii fig. 1, text-figs. 7 A-D, 12 A.

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†*Gyroplacosteus* gen. n. p. 107, *panderi* p. 108 pl. v fig. 1, pl. vi figs. 3-4, pl. viii figs. 2, 6, text-figs. 18-23, 27 b, *butovi* p. 109 pl. vii fig. 1 text-fig. 24 spp. n. Permian U.R.S.S., OBRUTSCHEW Trav. Inst. Palaeozool. Acad. Sci. U.R.S.S. 2.

†*Heintzaspis* nom. n. [= *Acanthaspis* Newb. 1875 nec Am. & Serv. 1843], STRAND Folia zool. hydrobiol. Riga 4 1932 p. 196. [Omitted from previous Record.]

†*Heintzichthys* nom. n. type *Dinichthys corrugata* (= *Stenognathus* Newberry nec Chaudhoir), WHITLEY Copeia 1933 p. 146.

†*Heterostius rhenanus* sp. n. Devonian Germany, GROSS Abh. preuss. geol. LdAnst. 154 p. 38 pl. vi fig. 2 text-figs. 9 A-E.

†*Holonema radiatum* sp. n. Devonian U.R.S.S., OBRUTSCHEW Trav. Inst. Paleozool. Acad. Sci. U.R.S.S. 2 p. 100 pl. v figs. 2-5, pl. vi figs. 1, 2, 5, pl. vii fig. 3, pl. viii figs. 1, 3-5, text-figs. 2-17, 26, 27 a; *H. eifeliense* figd., GROSS 283.

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†*Ohiodorulites* nom. n. type *Acanthaspis annatus* (= *Acanthaspis* Newberry nec Amyot & Serville), WHITLEY Copeia 1933 p. 146.

†*Oxyosteus magnus* figd., GROSS 283.

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†*Asterolepis ornata*, *radiata* figd., GROSS 282.

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†*Ceraspis carinata* figd., GROSS 283.

†*Ceratolepis stensioi* sp. n. Devonian Germany, GROSS Abh. preuss. geol. LdAnst. 154 p. 16 pl. iii text-fig. 4.

†*Pterichthys luedenscheidensis* p. 14 pl. ii figs. 2-3, text-figs. 1 F-G, *dohmi* p. 15 pl. ii fig. 1, text-fig. 1 H spp. n. Devonian Germany, GROSS Abh. preuss. geol. LdAnst. 154; *P. rhenanus* figd., GROSS t.c.; *P. concatenatus* figd., GROSS 282.

†*Remigolepis emarginata* sp. n. Devonian Greenland, SÄVE-SÖDERBERGH Medd. Grønland 94 (4) 1932 p. 27.

†*Taeniolepis* gen. n., *speciosa* sp. n. Devonian Germany, GROSS Fossilium Catalogus 57 1932 p. 35; *T. speciosa* sp. n. Devonian Baltic States, GROSS Palaeontographica Stuttgart 79 p. 43 pl. iv fig. 11 text-fig. 24.

PISCES.

†*Xenognathus* gen. n., *obscurus* sp. n. Triassic Texas, CASE Contr. Mus. Palaeont. Univ. Mich., III (1), 1928, p. 5, pl. i figs. 6-8; preocc. and replaced by *Cognognathus*, CASE J. Washington Acad. Sci. 23 p. 65.

†*Cognognathus* nom. n. to replace *Xenognathus* (preocc.), CASE t.c. p. 65.

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†*Diaphorognathus* gen. n. p. 77 type *Gyrolepis gillioti* Priem, BROUGH Ann. Mag. Nat. Hist. 10 1933.

†*Pteronisculus* gen. n. p. 118, *cicatosus* p. 120 fig. 3, *macropterus* p. 126 fig. 4 spp. n. Triassic Madagascar, WHITE Ann. Mag. Nat. Hist. 10 1933.

†*Rhadinichthys devonicus* figd., GROSS 282.

†*Tarrasius problematicus*, MOY-THOMAS 498.

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†*Brookvalia* gen. n., *gracilis* sp. n. Triassic Australia, WADE Ann. Mag. Nat. Hist. 12 p. 121 figs. 1-3.

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Acipenser stellatus stellatus cyrensis natio n., BERG Poiss. eaux douces U.R.S.S. 1 1932 p. 65.

Polyodon spatula young, THOMPSON 719.

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†*Heterostrophus phillipsi* sp. n. Oxford Clay England, WOODWARD Prée. Peterborough Nat. Hist. Soc. 56 1928 p. 59 5 pls.

†EUGNATHIDAE.

†*Caturus groenlandicus* sp. n. Jurassic Greenland, ALDINGER Medd. Grønland 86 1932 p. 1 pls. i-iii text-figs. 1-8.

†PYCNODONTIDAE.

†*Palaeobalistum dossantosi* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. e min. Brasil 8 1930 p. 88 pl. ii fig. 9.

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†*Lepidosteus suessionensis* figd., LE-
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†*Lycoptera middendorfi* figd., KRYSH-
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†*Pachythrissops macrolepidotus* sp. n. Jurassic Germany, WEITZEL Palaeont. Z. Berlin 15 p. 23 figs. 1-5.

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†*Otolithus (Elops) eocenicus* p. 389 pl. xii fig. 1, *rectus* p. 389 pl. xii fig. 2 spp. n. Eocene England, FROST Ann. Mag. Nat. Hist. 12.

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Albula antiqua sp. n. Cretaceous Florida, COCKERELL Copeia 1933 p. 226.

†*Otolithus (Albula) bartonensis* sp. n. Eocene England, FROST Ann. Mag. Nat. Hist. 12 p. 390 pl. xii fig. 6.

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†*Alosa mucronata* figd., WEILER 755a.

Anchoviella (= *Stolephorus*) notes, HARDENBERG 304.

Caspialosa caspia aestuarina subsp. n. Russia, BERG Poiss. eaux douces U.R.S.S. 1 1932 p. 88 fig. 94.

†*Clupea longimana* figd., WEILER 755a.

Corica soborna from Siam, SMITH 672.

Dussumieria productissima sp. n. Gulf of Suez, Suez Canal, CHABANAUD Bull. Inst. océanogr. Monaco 627 p. 4 figs. 3-6; *D. stolifera* = *Jenkinsia lamprotaenia*, BEEBE & TEE-VAN 50.

Engraulis notes, HARDENBERG 304.

†*Etrumeus salmoneus* figd., WEILER 755a.

Harengula dollfusi sp. n. Gulf of Suez, CHABANAUD t.c. p. 1 figs. 1, 2.

†*Mesoclupea* gen. n. p. 270, *show-changensis* p. 271 pl. i fig. 1 text-fig. 1, *globocephala* p. 272 pl. i fig. 2 text-fig. 2 spp. n. Cretaceous China, PING & YEN Bull. Geol. Soc. China Peking 12 1933.

†*Otolithus (Clupeidarum) altus* p. 390 pl. xii fig. 4 Eocene, *dilatatus* p. 390 pl. xii fig. 5 Oligocene England spp. n., FROST Ann. Mag. Nat. Hist. 12.

Pellonula vorax young, SVENSSON 705.

Sardinella pinnula = *S. anchovia*, BEEBE & TEE-VAN 50.

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Stolephorus notes, HARDENBERG 304; *S. baganensis* p. 258, *insularis* p. 260, *pseudoheterolobus* p. 261, *celebicus* p. 262 spp. n. Indo-Austral. seas; *S. indicus* notes p. 263; HARDENBERG Naturk. Tijdschr. Ned.-Ind. 93; *S. viridis* = *Jenkinsia lamprotaenia*, BEEBE & TEE-VAN 50.

Thrissa notes, HARDENBERG 304.

Thrissina notes, HARDENBERG 304.

Thrissocles notes, HARDENBERG 304.

ALEPOCEPHALIDAE.

Key to genera, BEEBE Zoologica N.Y. 16 p. 15.

Alepocephalus edentulus atlanticus subsp. n. N. Atlantic, ROULE & ANGEL Rés. Camp. Sci. Monaco 86 p. 4 pl. i fig. 1.

Anomalopteryx megalops sp. n. Bermuda, BEEBE Zoologica N.Y. 13 p. 159 fig. 39; 16 p. 17 fig. 1.

Bathytroctes curvifrons sp. n. N. Atlantic, ROULE & ANGEL t.c. p. 6 pl. i fig. 2; *B. drakei* p. 23 figs. 2-6, *rosstratus* p. 36 figs. 7-15, descr. and fig., larvae and young, ecology, etc., BEEBE Zoologica N.Y. 16.

Dolichopteryx notes on species p. 56, *D. binocularis* descr. and fig., osteology p. 59 figs. 16-18, *longipes* descr., larvae and young, ecology p. 70 figs. 19-21, BEEBE Zoologica N.Y. 16.

Leptochilichthys agassizii macrops subsp. n. N. Atlantic, ROULE & ANGEL t.c. p. 8 pl. i fig. 3.

Macromastax gen. n., *gymnos* sp. n.
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p. 161 fig. 40; 16 p. 80 fig. 22.

Photostylus gen. n., *pycnopterus* sp. n.
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Xenodermichthys copei young, BEEBE
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Brachymystax tumensis sp. n. Korea,
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Canada, BAJKOV Int. Rev. Hydrobiol.
29; *C. subautumnalis* sp. n. Russia
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MANN Z. Morph. Ökol. Tiere 27 p. 655
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Hucho ishikawae sp. n. Korea, MORI
Chosen Hakub. Z. 6 1928 pp. 54-70.

Oncorhynchus keta autumnalis p. 115,
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Salvelinus neiva sp. n. p. 83, *malma*
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Thymallus arcticus brevipinnis var. n.
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Limnol. Baikal 1 1931 p. 197; *T.*
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†*Otolithus (Argentina) erectus* sp. n.
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Mallotus elongatus sp. n. Korea, MORI
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Osmerus eperlanus eperlanus lado-
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Neonesthes nicholsi sp. n. Bermuda,
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†*Enchodus oliveirai* sp. n. Cretaceous Brazil, MAURY Monog. Serv. geol. e min. Brasil 8 1930 p. 96 pl. ii figs. 1, 3, 5, 7, 8.

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Nannocharax minutus sp. n. Luapulu R., WORTHINGTON Ann. Mag. Nat. Hist. (10) 12 p. 40.

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Myxocyprinus asiaticus, RENDAHL 607.

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Acanthorhodeus bergi sp. n. Korea, MORI Chosen Hakub. Z. 6 1928 pp. 54-70.

Acheilognathus yamatsutae sp. n. Korea, MORI t.c. pp. 54-70.

Alburnoides bipunctatus rossicus kubanicus natio n. Russia, BERG Zoogeographica 1 1932 p. 150; Faune de l'U.R.S.S. Poiss. 3 (3) p. 803.

Altigena subgen. n. (of *Osteochilus*) type *Varicorhinus discognathoides*, LIN t.c. p. 342.

Amplolabrus gen. n., *mirus* sp. n. Kwangtung, China, LIN t.c. p. 82 figs.

Aspiolucius merzbacheri figd., TCHANG 714.

†*Aspius gracilis* figd., WEILER 757.

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Carassioides = hybrid *Cyprinus carpio* × *Carassius auratus*, LIN 428.

†*Carassius auratus* figd., TCHANG 715.

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Chanodichthys wui sp. n. Sze-Chwan, China, RENDAHL Ark. Zool. 24 A. 16 p. 105.

Cirrhina molitorella, LIN 428; *C. afghana* is a *Cyprinion*, BERG 62.

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Dangila burmanica, kuhli, *lineata leptocheila* from Siam, SMITH 672.

Epalzeorhynchus mutabilis sp. n. Kweichow, China, LIN t.c. p. 85 pl. iv text-fig.

Garra poilanei sp. n. Indo-China, PETIT & TCHANG Bull. Mus. Paris 5 p. 189; *G. ceylonensis phillipsi* subsp. n. Ceylon, DERANIYAGALA Ceylon J. Sci. B. 17 p. 228 fig.

Gobio ciscaucasicus nom. n. for *G. uranoscopus caucasicus*, BERG Poiss. eaux douces U.R.S.S. 1 1932 p. 413; *G. sikuensis* sp. n. Hangchow, China, CHU Fish. West. Lake 1932 p. 22 figs.; notes on Chinese spp. and subsp., RENDAHL 607; *G. gobio macrocephalus* subsp. n. Korea, MORI Chosen Hakub. Z. 11 1930 pp. 39-49.

Gobiobotia homalopteridea sp. n. Szechwan, China p. 55, *boulengeri* descr. p. 52, RENDAHL t.c.; *G. tungi* sp. n. China, FANG Sinensia 3 p. 265 fig. 1.

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Labeo intermedius sp. n. L. Nyasa, WORTHINGTON P.Z.S. 1933 p. 297 fig. 3; *L. toboensis* sp. n. Gambia p. 66 fig. 23, *L. coubie*, *senegalensis* young p. 64 fig. 22, SVENSSON t.c.; *L. alluaudi* sp. n. Ivory Coast, PELLEGRIN Arch. Hydrobiol. 26 p. 105 fig.; *L. lugubris* sp. n. Congo, NICHOLS & LA MONTE Amer. Mus. Nov. 656 p. 1 fig. 1; *L. diplostomus*, RENDAHL 607.

Labeobarbus nanningsi sp. n. Portuguese Angola, BEAUFORT Bull. Soc. Zool. Fr. 57 p. 493 fig. 1.

Leuciscus waleckii tumensis subsp. n. Korea, MORI Chosen Hakub. Z. 11 1930 pp. 39-49; †*L. moravicus* sp. n. Oligocene Austria, PAUCA Ann. naturh. Mus. Wien 46 p. 151 pl. iv fig. 3; †*L. rutilus* figd., WEILER 757.

Lissochilus thienemanni sp. n. Sumatra, AHL SitzBer. Ges. naturf. Fr. 1933 p. 515.

Moroco oxyrhynchus sp. n., *variegatus septentrionalis* subsp. n. Korea, MORI Chosen Hakub. Z. 11 1930 pp. 39-49.

Mystacoleucus (= *Matsya*) *argenteus* from Siam, SMITH 672; *M. (Spinibarichthys) pingi*, RENDAHL 607.

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Opsariichthys uncirostris amurensis subsp. n. Siberia, BERG Poiss. eaux douces U.R.S.S. 1 1932 p. 384 fig. 295; *O. platypus, uncirostris bidens*, RENDAHL 607.

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Oreinus sinuatus var. *griffithii*, HORA 345.

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Phoxinellus (Pararhodeus) drusensis sp. n. Syria, PELLEGRIN Bull. Mus. Hist. nat. (2) 5 p. 368.

Phoxinus grumi belimiquensis subsp. n. Mongolia, RENDAHL Ark. Zool. 25 A. 11 p. 49; *P. perconurus gdaniensis* p. 359, *suifunensis* p. 361, *posnaniensis* p. 362 subsp. n. Russia, BERG Poiss. eaux douces U.R.S.S. 1 1932.

Procypris gen. n. p. 193, *merus* sp. n. China p. 194 figs. 1-2, LIN Lingnan Sci. Journ. 12.

Pseudogobio yaluensis sp. n. Korea, MORI Chosen Hakub. Z. 6 1928 pp. 54-70.

Pseudogyrinocheilus gen. n. type *Discognathus procheilus*, FANG Sinensia 3 p. 255.

Pseudolaubuca tsinanensis sp. n. China, MORI Japan. J. Zool. 5 p. 165 fig. 1.

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Sarcocheilichthys geei, LIN 428.

Scaphiodonichthys burmanicus from Siam, SMITH 672.

Sinilabeo gen. n. type *Varicorhinus tungting*, RENDAHL Ark. Zool. 24 A. 16 p. 81 figs.

Squalalburnus gen. n. type *Alburnoides oblongus*, BERG Poiss. eaux douces U.R.S.S. ed. 3 1 1932 p. 482; Faune de l'U.R.S.S. Poiss. 3 (3) p. 746.

†*Tinca furcata*, *leptosoma* figd.; WEILER 757.

Varicorhinus babaulti sp. n. Kivu region, PELLEGRIN Bull. Mus. Paris 4 1932 p. 958; *V. nyasensis* sp. n. L. Nyasa, WORTHINGTON P.Z.S. 1933 p. 299 fig. 4; *V. rarus* sp. n. China, LIN Lingnan Sci. Journ. 12 p. 204 fig. 1.

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Acanthophtalmus kuhli from Siam, SMITH 672; figd., MEINKEN 470.

Cobitis albicollis sp. n. Bulgaria, CHICHKOFF Trav. Soc. bulg. Sci. nat. 15-16 1932 p. 368 fig.; *C. multifasciata*, *rotundicauda* spp. n. Korea, WAKIYA & MORI Chosen Hakub. Z. 9 1929 pp. 31-33.

Deuterophysa subgen. n. (of *Nemacheilus*) type *Diplophysa strauchii*, RENDAHL Ark. Zool. 25 A. 11 p. 23.

Eucirrichthys doriae from Siam, SMITH 672.

Hedinichthys subgen. n. (of *Nemacheilus*) type *Nemacheilus yarkandensis*, RENDAHL t.c. p. 26.

Leptobotia kudoii sp. n. Manchuria, MORI J. Chosen N.H. Soc. Korea 1933 p. 13 fig.

Nemacheilus stoliczkae lacus-nigri var. n. Russia, BERG Abh. Pamir Exped. 1928 Leningrad 8 1931 p. 28 pl. i; *N. prashari* sp. n. N.W.F. Prov., India p. 189 pl. v figs. 1-2; *N. baluchiorum* p. 185 pl. v figs. 6-7, *brahni* p. 186 pl. v figs. 4-5, *kessleri* p. 187 pl. v fig. 3 text-fig., from Baluchistan descr. and fig., HORA Rec. Ind. Mus. 35; *N. nicholsi* p. 53 pl. i fig. 1 text-fig., *kohchangensis* p. 56 pl. i fig. 2 text-fig., *masyae* p. 58 pl. i fig. 3 text-fig., *binotatus* p. 61 pl. i fig. 4 spp. n. Siam, SMITH J. Nat. Hist. Soc. Siam Suppl. 9; *N. griffithii*, HORA 345;

N. morphology, division into subgenera etc. p. 2 figs.; *N. (Triplophysa) hutjertjuensis* p. 28, *N. hsutschouensis* p. 41 spp. n. Mongolia; *N. (Tauphysa) kungessanus* p. 30, *N. (Deuterophysa) strauchii* p. 33, *papillo-labiatus* p. 35, *N. dorsonotatus* p. 38, *N. (Hedinichthys) yarkandensis* p. 46 descr., RENDAHL t.c.

Tauphysa subgen. n. (of *Nemacheilus*) type *Nemacheilus kungessanus*, RENDAHL t.c. p. 22.

Triplophysa subgen. n. (of *Nemacheilus*) type *Nemacheilus hutjertjuensis*, RENDAHL t.c. p. 21.

HOMALOPTERIDAE.

Homaloptera modesta from Siam, SMITH 672.

SILUROIDEA.

Geographical distribution of Indo-Australian Archipelago Siluroids, GIL-TAY 250.

ARIIDAE.

Arius lagoensis sp. n. Lagos, PFAFF Vid. Medd. nat. For. 94 p. 298 fig. 9.

Hemipimelodus daugueti sp. n. Indo-China, CHEVEY Trav. Inst. océan. Indochine Mém. 4 1932 p. 41 pl. xiii.

PLOTOSIDAE.

Exilichthys gen. n. type *Cnidoglanis nudiceps*, WHITLEY Rec. Austr. Mus. 19 p. 65.

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Kryptopterus apogon, *limpok* from Siam, SMITH 672.

Silurichthys phaiosoma from Siam, SMITH 672.

Silurodes hypophthalmus from Siam, SMITH 672.

Wallago miostoma from Siam, SMITH 672.

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Bagrus bayad macropterus var. n. Niger, PFAFF Vid. Medd. nat. For. 94 p. 287 fig. 4.

Chrysichthys longifilis sp. n. Niger, PFAFF t.c. p. 289 fig. 5.

Leiocassis microps sp. n. Sze-Chwan, China p. 93, *crassilabris* p. 90, *emarginatus* p. 94 descr., RENDAHL Ark. Zool. 24 A. 16; *L. hwanghoensis* sp. n. China, MORI Japan. J. Zool. 5 p. 167 figs. 3-4; *L. ussuriensis* figd., SHAW 661.

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Glyptothorax prashadi sp. n. Burma, MUKERJI Rec. Ind. Mus. 34 1932 p. 281 fig. 1; *G. dorsalis* from Siam, SMITH 672.

Oreoglanis gen. n. p. 70, *siamensis* sp. n. Siam p. 72 pl. iii text-figs., SMITH J. Nat. Hist. Soc. Siam Suppl. 9.

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Clarias of L. Nyasa etc.; *C. nyasensis* p. 308 fig. 9, *longibarbis* p. 309 fig. 10 spp. n., WORTHINGTON P.Z.S. 1933; *C. confluentus* sp. n. Congo, NICHOLS & LA MONTE Amer. Mus. Nov. 656 p. 3 fig. 3; *C. loanquensis* sp. n. Zambezi, WORTHINGTON Ann. Mag. Nat. Hist. (10) 12 p. 46 fig.

Uegitglanis zammaranoi, GIANFERBARI 247.

AMPHILIIDAE.

Amphilius kivuensis sp. n. near L. Kivu, PELLEGRIN Bull. Soc. Zool. Fr. 58 p. 172; *A. pictus* sp. n. Liberia, NICHOLS & LA MONTE Amer. Mus. Nov. 626 p. 1 fig.

Doumea key to spp. p. 116, *D. chapuisi* sp. n. Ivory Coast p. 114 fig., PELLEGRIN Arch. Hydrobiol. 26.

SCHILBEIDAE.

Eutropiellus gen. n., *kasai* sp. n. Congo, NICHOLS & LA MONTE Amer. Mus. Nov. 656 p. 5 fig. 4.

Parailia spiniserrata sp. n. Gambia, SVENSSON K. Sv. Vet. Ak. Handl. 12 (3) p. 73 pl. iv fig. 2 text-fig. 24.

Schilbe palmeri sp. n. Gambia. p. 71 pl. iii fig. 4, *S. mystus* notes, young p. 70 pl. iii fig. 3, SVENSSON K. Sv. Vet. Ak. Handl. 12 (3).

MOCHOCIDAE.

Chiloglanis occidentalis p. 112 fig., *normani* p. 113 fig. spp. n. Ivory Coast, PELLEGRIN Arch. Hydrobiol. 26.

Synodontis koensis sp. n. Ivory Coast, PELLEGRIN Arch. Hydrobiol. 26 p. 111 fig.; *S.* notes on young of Gambia spp., SVENSSON 705; *S. angelicus zonatus* var. n. Belgian Congo, POLL Ann. Mus. Congo (Zool.) Ser. 1 3 p. 134 fig. 11.

PIMELODIDAE.

Parapimelodus gen. n. type *Pimelodus valenciennis*, LA MONTE Copeia 1933 p. 226; *P. brevis* sp. n. Argentine, MARINI, NICHOLS & LA MONTE Amer. Mus. Novit. 618 p. 1 fig. 1.

TRICHOMYCTERIDAE.

Pygidium alterum sp. n. Argentine, MARINI, NICHOLS & LA MONTE Amer. Mus. Nov. 618 p. 2 fig. 2.

LORICARIIDAE.

Carinotus subgen. n. (of *Plecostomus*) type *P. (Carinotus) carinotus* sp. n. Brazil, LA MONTE Amer. Mus. Nov. 591 p. 1 fig.

Plecostomus commersonoides Buenos Aires p. 3, *P. niger, meleagris* S.E. Brazil p. 4 spp. n., MARINI, NICHOLS & LA MONTE Amer. Mus. Nov. 618.

APODES.

†*Otolithus (Congridarum) carinatus, otapiriensis, mysticus* spp. n. Oligocene N. Zealand, FROST Trans. N.Z. Inst. 63 p. 137 figs. 4, 27, 29-30; *O. (Congridarum) bartonensis* p. 391 pl. xii fig. 8, *ovatus* p. 391 pl. xii fig. 9, *websteri* p. 392 pl. xii fig. 10, *eocenicus* p. 392 pl. xii fig. 11, *attenuatus* p. 393 pl. xii fig. 14, *furcatus* pp. 393-394 pl. xii fig. 17 spp. n. Eocene England, FROST Ann. Mag. Nat. Hist. 12.

Leptocephalus manokwariensis sp. n. New Guinea, GILTY Mém. Mus. Roy. H.N. Belg. Hors Sér. 5 (3) p. 38 fig. 12.

MURAENIDAE.

Gymnothorax herrei nom. n. = *G. brunneus* Herre nec Nichols; *G. ocellatus* notes, BEEBE & TEE-VAN Zoologica N.Y. 13 p. 138.

Muraena tukua p. 171 pl. xxiv, *shirleyi* p. 172 pl. xxiv **spp. n.** New Zealand, GRIFFIN Trans. N.Z. Inst. 63; *M. (Muraena) albomarginata* **sp. n.** Senegal, PFAFF Vid. Medd. nat. For. 94 p. 305 pl. vi fig. 1.

SERRIVOMERIDAE.

Paraserrivomer **gen. n.** type *Gavialis-ceps hasta*, ROULE & ANGEL Rés. Camp. Sci. Monaco 86 p. 70 pl. iv fig. 33.

Platuronides key to spp., *P. ophioccephalus* p. 5 figs. 1-3, *acutus* p. 8 figs. 3-5 **spp. n.** W. Indies, PARR Bull. Bingham Ocean. Coll. 3 (5) 1932.

NEMICHTHYIDAE.

Avocettina exophthalma **sp. n.** W. Indies, PARR Bull. Bingham Ocean. Coll. 3 (5) 1932 p. 16 figs.

Labichthys carinatus, PARR t.c. p. 18 figs.

MURAENESOCIDAE.

†*Otolithus (Muraenesox) minimus* **sp. n.** Eocene England, FROST Ann. Mag. Nat. Hist. 12 p. 393 pl. xii fig. 16.

CONGRIDAE.

Ariosoma synonymy of genus, *A. perturbator* **sp. n.** W. Indies, PARR Bull. Bingham Ocean. Coll. 3 (5) 1932 p. 31 figs.

Pseudoxenomystax notes, PARR t.c. p. 28.

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†*Otolithus (Myrus) caudatus* **sp. n.** Eocene England, FROST Ann. Mag. Nat. Hist. 12 p. 394 pl. xii fig. 18.

OPHICHTHYIDAE.

†*Otolithus (Ophichthys) acutus* **sp. n.** Eocene England, FROST Ann. Mag. Nat. Hist. 12 p. 393 pl. xii fig. 15.

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Ilyophis brunneus, PARR 546.

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Lewinichthys **gen. n.** type *Belone ferox*, WHITLEY Rec. Austr. Mus. 19 p. 67.

Lhotskia **gen. n.** type *Belona macleayana*, WHITLEY t.c. p. 67.

HEMIRHAMPHIDAE.

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Habits, breeding, development, function of "beak," etc., SMITH Trans. R. Soc. S. Afr. 21 p. 129.

Hemirhamphus key to S. African spp. p. 131, *improvisus* p. 142 pl. xi fig. 1 text-fig., *knysnaensis* p. 144 pl. xi fig. 2 text-fig **spp. n.** S. Africa, SMITH t.c.

Odontorhamphus **gen. n.** p. 51, *chancellori* **sp. n.** p. 52 fig. 1, Cook Archipelago, WEED Field Mus. Pub. Chicago Zool. 20.

EXOCEOTIDAE.

No. of vertebrae and taxonomy, BRUUN Vid. Medd. nat. For. 94 p. 375.

Cypselurus antarci **sp. n.** W. Indies, BEEBE & HOLLISTER Zoologica 12 1931 p. 83 fig. 15; *C. comatus*, *heterurus* notes, BRUUN t.c. p. 382.

Fodiator acutus pacificus **subsp. n.** Bay of Panama, BRUUN t.c. p. 378.

Parexocoetus mesogaster, *mento* defined, development p. 380 fig., *P. mento atlanticus* **subsp. n.** Tropical Atlantic p. 382, BRUUN t.c.

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Aplocheilichthys gambiensis **sp. n.** Gambia, SVENSSON K. Sv. Vet. Ak. Handl. 12 (3) p. 86 pl. vii fig. 1 text-fig. 27; *A. macrophthalmus* p. 53 fig. 1, *flavipinnis* p. 54 fig. 2 **spp. n.** Nigeria, MEINKEN Bl. Aquarienkunde 43 1932.

Aphyosemion notes p. 182; *A. meinkenii* **nom. n.** = *Panchax pictus* Meinken nec Cuv. & Val.; *A. calliurum ahli* **nom. n.** = *Panchax calliurus* var. *caeruleus* Meinken nec *A. caeruleum* Blgr.; *A. bivittatum hollyi* **nom. n.** = *Fundulopanchax bivittatus* var. *coerulea* Meinken nec *A. caeruleum* Blgr. pp. 183-4, MYERS Copeia 1933.

Callopanchax **subgen. n.** (of *Aphyosemion*) type *Aphyosemion sjoestedti*, MYERS t.c. p. 184.

Cyprinodon darrorensis **sp. n.** Italian Somaliland, GIANFERRARI Atti Soc. ital. Milano 71 p. 210 figs. 1-3; *C.*

desioi sp. n. Italian Somaliland, GIANFERRARI Atti Soc. ital. Milano 71 p. 214 figs. 1-3; *C. zaccarinii* sp. n. Gulf of Aden, GIANFERRARI Atti Soc. ital. Milano 72 p. 82 figs. 1-3; *C. zaccarinii airebejensis* var. n. Gulf of Aden, GIANFERRARI Atti Soc. ital. Milano 72 p. 86 figs. 1-2.

Epiplatys notes, MYERS t.c.

Fundulopanchax filamentosus sp. n. W. Africa, MEINKEN Bl. Aquarienkunde 44 p. 249 fig.

Fundulus gambiensis sp. n. Gambia, SVENSSON t.c. p. 81 fig. 25.

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Pachypanchax gen. n. type *Haplochilus playfairii*, MYERS Amer. Mus. Nov. 592 p. 1.

Panchax notes, MYERS t.c.; *P. steindachneri* sp. n. Gambia p. 84 pl. vi figs. 2, 4 text-fig. 26, *P. senegalensis* notes p. 82, SVENSSON t.c.; *P. taeniatus* sp. n. Niger, PFAFF Vid. Medd. Nat. For. 94 p. 294 fig. 7; *P. grahami decemfasciata* var. n. Ivory Coast, PELLEGRIN Arch. Hydrobiol. 26 p. 118; *P. (Aphyosemion) pictus* sp. n. W. Africa, MEINKEN t.c. p. 56 fig. 3.

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†*Otolithus (Macruronus) pukeuriensis* p. 133 fig. 31, *O. (Macrurus) sagittiformis* p. 138 figs. 33, 34, *O. (Macruridarum) latusulcatus* p. 139 figs. 35, 36 spp. n. Oligocene and Miocene N. Zealand, FROST Trans. N.Z. Inst. 63.

MACRURIDAE.

Bathygadus vaillanti sp. n. Azores, ROULE & ANGEL Rés. Camp. Sci. Monaco 86 p. 63 pl. iii fig. 30.

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GADIDAE.

Boreogadus pearyi sp. n. Arctic America, NICHOLS & MAXWELL Copeia 1933 p. 26.

Bregmaceros macelellandi from Siam, SMITH 672.

†*Otolithus (Physiculus) terakohensis* sp. n. Oligocene N. Zealand, FROST Trans. N.Z. Inst. 63 p. 139 figs. 39, 40.

MERLUCCIIDAE.

Merluccius hubbsi sp. n. Argentina, MARINI Physis 11 p. 322 fig.

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Regalecus gladius, PADOVANI 539; *R. pacificus*, WHITLEY 763 p. 70 fig. 2.

Trachipterus arawatae, WHITLEY 763 p. 72; *T. ijimae*, BOLIN 75.

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Regilophotes gen. n. type *Lophotes guntheri*, WHITLEY Rec. Austr. Mus. 19 p. 72.

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SOLENOTOMIDAE.

Solenostomus phantasticus sp. n. Philippines, HERRE Copeia 1933 p. 17.

SYNGNATHIDAE.

Dunckerocampus gen. n. type *Syngnathus dactyliophorus* (for *Acanthognathus* Duncker preocc.), WHITLEY Rec. Austr. Mus. 19 p. 67.

Hippocampus europaeus p. 561, France, *reidi* p. 561 G. of Mexico, *obtusius* p. 562 U.S.A. (Atlantic), *hildebrandi* p. 562 Panama (Pacific), *regulus* p. 563 U.S.A. (Atlantic) spp. n., GINSBURG J. Wash. Acad. Sci. 23; *H. punctulatus* notes and synonymy, BEEBE & TEE-VAN 50.

Ichthyocampus earce from Siam, SMITH 672.

Penetopteryx fowleri sp. n. New Hebrides, WHITLEY t.c. p. 65.

Syngnathus Mediterranean forms, ANCONA 7; *S. (Parasyngnathus) maxweberi* nom. n. = *Syngnathus punctatus* Weber nec Rafinesque, WHITLEY t.c. p. 66.

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Rondeletia bicolor referred to this order, PARR 547 p. 25.

†*Homonotichthys* gen. n. type *Homonotus dorsalis* (= *Homonotus* Agassiz nec Dahlborn), WHITLEY Copeia 1933 p. 146.

POLYMIXIDAE.

†*Otolithus* (*Polymixia*) *eocenicus* sp. n. Eocene England, FROST Ann. Mag. Nat. Hist. 12 pp. 394-395 pl. xii fig. 20.

BERYCIDAE.

†*Otolithus* (*Beryx*) *eocenicus* sp. n. Eocene England, FROST Ann. Mag. Nat. Hist. 12 p. 395 pl. xii fig. 22.

DIRETMIDAE.

Diretmus argenteus young, PARR 547 p. 6 fig. 2.

HOLOCENTRIDAE.

Cephalofarar subgen. n. (of *Holocentrus*) type *H. sicciferum*, WHITLEY Rec. Austr. Mus. 19 p. 69.

Faremusca subgen. n. (of *Holocentrus*) type *H. punctatissimum*, WHITLEY t.c. p. 68.

Kutaflammeo subgen. n. (of *Holocentrus*) type *H. tahiticum*, WHITLEY t.c. p. 69.

CARISTIIDAE.

†*Absalomichthys* gen. n. type *Abantis velifer* (for *Abantis* Jordan nec Hopffer), WHITLEY Copeia 1933 p. 146.

GIBBERICHTHYIDAE.

New family, PARR Bull. Bingham Oceanogr. Coll. 3 (6) p. 4.

Gibberichthys gen. n., *pumilus* sp. n. Bahamas, PARR t.c. p. 5 fig. 1.

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New family, PARR Bull. Bingham Oceanogr. Coll. 3 (6) p. 9.

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Melamphaes key to spp. p. 13; *M. opisthopterus* sp. n. Bermudas-Bahamas p. 18 fig. 7; *M. microps longivalis* subsp. n. Bahamas p. 16 fig. 6; *M.*

lugubris, *robustus*, *cristiceps*, *triceratops*, *mizolepis*, *beani* descr. and fig., PARR Bull. Bingham Ocean. Coll. 3 (6); *M. triceratops* sp. n. N. Atlantic, ROULE & ANGEL Rés. Camp. Sci. Monaco 86 p. 66 pl. iii fig. 32.

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†*Otolithus* (*Serranidarum*) *serratus* sp. n. Miocene N. Zealand, FROST Trans. N.Z. Inst. 63 p. 141 figs. 43, 44.

SERRANIDAE.

Of China, CHU 151.

Anthias nicholsi sp. n. off Virginia, FIRTH Copeia 1933 p. 158 fig.

Coreosiniperca subgen. n. (of *Siniperca*) type *Siniperca roulei*, FANG & CHONG Sinensia 2 1932 p. 137. [Note: *Coreosiniperca* p. 149.]

Dampiera atrofasciatus sp. n. Philippines, HERRE Copeia 1933 p. 17.

Hapalogenys revision, MATSUBARA 462.

Promicrops itaiara from Siam, SMITH 672.

Pseudochromis colei p. 18, *similimus* p. 19 spp. n. Philippines, HERRE t.c.

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Stereolepis inoko = *Therapon jarbua*, SCHMIDT 640.

Therapon jarbua synonymy, SCHMIDT 640.

Variola louti from Queensland, WHITLEY 763 p. 75.

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CHILODIPTERIDAE.

Adenapogon (*Scopelapogon*) *cephaletes*, WHITLEY Rec. Austr. Mus. 19 p. 74 fig. 3.

Apogon sellicauda, *pigmentarius*,
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Neoscopelus = *Adenapogon*, WHIT-
LEY t.c. p. 73.

Pterapogon gen. n., *kauderni* sp. n.
Celebes, KOUMANS Zool. Meded. 16 p.
78 fig.

Rhctogramma = *Galeagra*, PARR 547.

Scopelapogon subgen. n. (of *Adena-*
pogon) type *Adenapogon woodi*, WHIT-
LEY t.c. p. 74.

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†*Perca elongata* sp. n. Pliocene Ger-
many, WEILER Arch. Hydrobiol. Stutt-
gart 25 p. 292 pl. ii fig. 1.

SILLAGINIDAE.

Of Philippines etc., FOWLER Bull.
U.S. Nat. Mus. 100 (12) p. 415.

Sillaginopodys subgen. n. (of *Sillago*)
type *Sillago chondropus*, FOWLER t.c.
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LIN Lingnan Sci. J. 12 p. 96 fig.

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Ambassis ventral axillary scales,
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LUTIANIDAE.

Caesio chrysozonus translimitanus
subsp. n. Queensland, WHITLEY Rec.
Austr. Mus. 19 p. 80.

Ulapiscis gen. n., *kennedyi* sp. n.
Ellice Is., Oceania, WHITLEY t.c. p. 78
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Otolithoides gen. n. type *Otolithus*
biauritus, FOWLER t.c. p. 364.

Pama gen. n. type *Bola pama*,
FOWLER t.c. p. 360.

Pterotolithus subgen. n. (of *Otolithes*)
type *Otolithus maculatus*, FOWLER t.c.
p. 359.

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Of Philippines etc., FOWLER Bull.
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Mullus argentiniae sp. n. Argentina,
HUBBS & MARINI Physis 11 p. 347.

Pseudupeneus orientalis sp. n. Easter
I., FOWLER t.c. p. 294 fig. 23.

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Lethrinus perselectus sp. n. Queens-
land, WHITLEY, Rec. Austr. Mus. 19
p. 75.

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Of Philippines etc., FOWLER Bull.
U.S. Nat. Mus. 100 (12) p. 64.

Dulosparus subgen. n. (of *Sparus*)
type *Pagrus filamentosus*, FOWLER t.c.
p. 168.

†*Pagrus gracilis* sp. n. Oligocene Ger-
many, WEILER N. Jahrb. Min. 1932
68 b p. 321 fig. 12a.

Psilopentapodus subgen. n. (of *Penta-*
podus) type *Pentapus dux*, FOWLER t.c.
p. 83.

Rhabdosargus subgen. n. (of *Diplodus*)
type *Sargus auriventris*, FOWLER t.c.

Simocantharus subgen. n. (of *Spondy-*
liosoma) type *Cantharus aeneus*, FOWLER
t.c. p. 185.

†*Otolithus* (*Sparidarum*) *sigmoidalis*
sp. n. Oligocene and Miocene New Zea-
land, FROST Trans. N.Z. Inst. 63 p. 140
figs. 41-42; †*O.* (*Sparidarum*) *faurai*
sp. n. Pliocene Spain, CHAINE & DUVER-
GIER Publ. Inst. catal. Hist. nat. 3 1931
p. 15 pl. i figs. 1-2, pl. ii figs. 12-13.

KYPHOSIDAE.

Of Philippines etc., FOWLER Bull. U.S. Nat. Mus. 100 (12) p. 203.

Kyphosus bleekeri sp. n. E. Indies, FOWLER t.c. p. 211.

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CHAETODONTIDAE.

Revision of Pomacanthinae, BRUNNER P.Z.S. 1933 p. 543.

Angelichthys bermudensis, BEEBE & TEE-VAN 50.

Apolemichthys subgen. n. (of *Holacanthus*) type *Holacanthus xanthurus*, BRUNNER t.c. pp. 577, 578.

Arusetta subgen. n. (of *Heteropyge*) type *Chaetodon asfur*, BRUNNER t.c. pp. 569, 572.

Centropyge flavicauda sp. n. China Sea p. 597 fig. 29, *C. acanthops* figured p. 596 fig. 28, BRUNNER t.c.

Chaetodon auriga setifer figd., AHL 3.

Genicanthus lamareck trilineatus Misol, amboinensis Amboina var. n., BRUNNER t.c. p. 576 figs.

Heteropyge gen. n. type *Holacanthus xanthometopon*, BRUNNER t.c. p. 569.

Holacanthus chapmani sp. n. Philippines, HERBE Copeia 1933 p. 19.

Plitops subgen. n. (of *Holacanthus*) type *Holacanthus clarionensis*, BRUNNER t.c. pp. 578, 581.

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ARRANGED BY

MALCOLM A. SMITH, M.R.C.S., L.R.C.P.

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XV. AVES

ARRANGED BY

W. L. SCLATER, M.A.

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XVI. MAMMALIA

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W. L. SCLATER, M.A.

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INCLUDING NEW NAMES FOR GENERA PREVIOUSLY ESTABLISHED

RECORDED IN THIS VOLUME FOR 1933.

The total number of New Genera enumerated in this list is 2,087, an increase of 97 on that of the previous year.

In the last six years the numbers have been:—1927, 2,336; 1928, 2,219; 1929, 2,022; 1930, 2,139; 1931, 2,377; 1932, 1,990.

The list for 1933 is made up as follows:—

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* Dr. Lambrecht has unfortunately used the same name twice for an extinct genus of Cormorants and an extinct genus of Crows.

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 Talesapia *Fauvel* Vermes 132
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 Tarabulida *Roewer* Arachn. 44
 Tarassus *Aldrich* Ins. 373
 Tarsohomoneura *Henkel* Ins. 379
 Tarsopsylla *Jordan* Ins. 389
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 Tasmaphena *Iredale* Moll. 88
 Tatabelodon *Frick* Mam. 76
 Tauphysa *Rendahl* Pisces 51
 Taurometopa *Meyrick* Ins. 332
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 Teichertoceras *A. F. Foerste* Moll. 117
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 Tolmerinus *Bernhauer* Ins. 206
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Trigonoglossa Dunbar & Condra Brach.
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Trinaconeura Turner Ins. 337
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Tunagyna Chamberlin & Ivie Arachn. 37
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Wiesnerella Cushman Prot. 61
Wilmattina Pilsbry & Cockerell Moll. 88
Woodwardiella Michaelsen Vermes 135
Wuhuia Kobayashi Arachn. 33

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Xenura Kobold Echin. 24
Xenyllogastrura Denis Ins. 435
Xerophilophaga Enderlein Ins. 375
Xiphovelia Lundblad Ins. 395

Yanacea Carriker Aves 86
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Zachaetomyia Malloch Ins. 378
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THIRD SUPPLEMENTARY LIST OF ABBREVIATIONS, WITH
TITLES OF PERIODICAL PUBLICATIONS, CONTAINING
PAPERS DEALING WITH MATTERS OF ZOOLOGICAL
IMPORTANCE.

Since the issue of the last volume of the Zoological Record a number of new periodicals have commenced publication, a few old ones have been revived, while a few have been accidentally omitted from the list published in the Record for 1930.

It has therefore been found necessary to print a third supplementary list of these. It is hoped to publish with the next volume of the Record a new and revised list arranged in accordance with the new edition of the "World List" recently issued.

The following are the library symbols used in this list:—

- N** General Library of the Natural History Museum.
- Nz.** Zoological Library of the Natural History Museum.
- Ng.** Geological Library of the Natural History Museum.
- Nb.** Botanical Library of the Natural History Museum.
- Nm.** Minerological Library of the Natural History Museum.
- B.** British Museum (Bloomsbury).
- E.** Entomological Society.
- G.** Geological Society.
- I.** Imperial Institute of Entomology.
- L.** Linnean Society.
- M.** Royal Society of Medicine.
- R.** Royal Society.
- S.** Royal College of Surgeons.
- Sc.** Science Library, South Kensington
- T.D.** Tropical Diseases Library.
- U.** University College.
- V.** Royal College of Veterinary Surgeons.
- Z.** Zoological Society.

- Acta. Faun. Flor. Univ. București.*—Acta pro Fauna et Flora Universali. Ser. 1 Zoologia. Bucuresti. [Nz.]
- Acta Orn. Mus. zool. polon.* Acta Ornithologica Musei Zoologici Polonici. Warszawa. [Nz.]
- Acta phaenolog. 's-Gravenhage.* Acta Phaenologica. 's-Gravenhage. [N.]
- Acta Soc. Sci. nat. Moravicae.* Acta Societatis Scientiarum Naturalium Moravicae. Brno. [Práce Moravské Přírodovědecké Společnosti.] [N.]
- Afra, Paris.*—Afra. Cahiers d'entomologie. Paris. [Nz.]
- Ann. Sta. Océanogr. Salammô Tunis.*—Station Océanographique de Salammô, Annales. Tunis. [N.]
- Aquarium Philadelphia.*—Aquarium. Philadelphia, Pa., U.S.A. [Nz.]
- Arb. morph. taxon. Entom. Berlin.*—Arbeiten über morphologische und taxonomische Entomologie aus Berlin-Dahlem. [Nz.]
- Arb. physiol. angew. Entom. Berlin.*—Arbeiten über physiologische u. angewandte Entomologie aus Berlin-Dahlem. [Nz.]
- Arctica Leningrad.*—Arctica. The Arctic Institute of U.R.S.S. Leningrad. [N.]
- Årstr. Göteborgs Mus.*—Årstryck Göteborgs Museum. Göteborg. [N.]
- Atti Mus. Stor. nat. Trieste.*—Atti del Museo Civico di Storia Naturale di Trieste. [N.]
- Ber. naturw. Ver. Dessau.*—Berichte des Naturwissenschaftlichen Vereins in Dessau (Anhalt). [N.]
- Ber. oberhess. Ges. Giessen.*—Bericht der Oberhessischen Gesellschaft für Natur- und Heilkunde zu Giessen. [N.]
- Bird-banding, Boston.*—Bird-banding. A journal of ornithological investigation. Boston, U.S.A. [Nz.]
- Bol. Agric. Com. Industr. Bahia.*—Boletim da Agricultura, Comercio e Industria Bahia. [Nz.]
- Bol. Serv. geol. min. Brasil.*—Serviço Geologico e Mineralogico do Brasil. Boletim Rio de Janeiro. [Ng.]
- Boll. Mus. Zool. Anat. comp. Torino.*—Bollettino dei Musei di Zoologia ed Anatomia comparata della R. Università di Torino. [Nz.]
- Bull. Amer. School Prehist. Res.*—Bulletin of the American School of Prehistoric Research. Peabody Museum, New Haven, Conn. [Ng.]
- Bull. Dept. Zool. Panjab Univ. Lahore.*—Bulletin of the Department of Zoology Panjab University, Lahore. [Nz.]
- Bull. Florida Geol. Surv.*—Florida State Geological Survey. Bulletin. Tallahassee, Fla. [Ng.]
- Bull. Mus. Nat. Kichineff.*—Bulletin du Musée National des sciences naturelles de Kichineff. Roumanie. Chișinău (Kichineff). [N.]
- Bull. Nat. Mus. Canad.*—Bulletin. National Museum of Canada. Ottawa. [Formerly Mus. Bull. Victoria Mem. Mus. Ottawa.] [14697 N.]
- Bull. sci. Bourgogne, Dijon.*—Bulletin Scientifique de Bourgogne. Dijon [printed at Toulouse]. [N.]
- Bull. [or Trans.] Tomsk State Univ.*—Bulletin (or Transactions) of [Tomsk State University. Tomsk. [N.]
- Bull. Univ. Arménie Erivan.* Bulletin de l'Université d'Etat de la R.S.S. d'Arménie Erivan. [N.]
- Consigl. naz. Ricer. Conveg. Biol.*—Consiglio nazionale delle ricerche Convegni Biologici. Napoli, Bologna etc. [N.]

- Contr. Mus. Paleont. Univ. Michigan.*—Contributions from the Museum of Paleontology. University of Michigan. Ann Arbor. [Replaces *Contr. Mus. Geol. Paleont.*] [Ng.]
- Explor. Mers U.R.S.S.*—Explorations des Mers d'U.R.S.S. Service Hydro-Meteorologique d'U.R.S.S. Leningrad. [N.]
- Field & Laboratory, Dallas.* Field & Laboratory. Contributions from the Science Departments of Southern Methodist University. Dallas, Texas. [N.]
- Giornale Geol. Bologna.* Giornale di Geologia (gia Giornale di Geologia pratica). Annali del R. Museo Geologico di Bologna. [Ng.]
- Human Biol. Baltimore.*—Human Biology. A record of research. Baltimore. [Sc.]
- J. cell. & comp. Physiol. Philad.*—Journal of cellular and comparative Physiology. Philadelphia. [Sc.]
- J. Cycle bio-zool., Kiev.*—Journal du Cycle Bio-zoologique. Académie des Sciences d'Ukraine. Kyiv (Kiev). [Nz.]
- J. Darjeeling Nat. Hist. Soc.*—Journal of the Darjeeling Natural History Society. Darjeeling. [N.]
- J. Fac Sci. Hokkaido Univ. Geol.*—Journal of the Faculty of Science, Hokkaido Imperial University. Ser. IV. Geology and Mineralogy. [Ng.]
- J. Soc. Brit. Entom.* Journal. Society for British Entomology. Southampton (formerly J. Ent. Soc. S. England). [Nz.]
- J. Tenn. Acad. Sci.*—Journal of the Tennessee Academy of Science. Nashville, Tennessee. [N.]
- Kleintier u. Pelztier, Leipzig.*—Kleintier und Pelztier, Leipzig [continuation of *Die Pelztierzucht*]. [Nz.]
- Lansania Tokyo.*—Lansania. Journal of Arachnology and Zoology. Tokyo. [Nz.]
- Med. 's Rijks geol. Dienst. Leiden.*—Mededeelingen van 's Rijks Geologischen Dienst, Leiden. [Ng.]
- Mem. Acad. Cien. Barcelona.*—Memorias de la Academia de Ciencias y Artes de Barcelona. [Formerly *Mem. R. Acad. Cien.*]. [N.]
- Mem. Soc. geol. ital.*—Memorie della Società Geologica Italiana. Roma. [Ng.]
- Micropaleont. Bull.*—Micropaleontology Bulletin. Ann Arbor, Michigan. [Ng.]
- Monogr. Ser. geol. min. Brasil.*—Monographias do Serviço Geologico e Mineralogico do Brasil. Rio de Janeiro. [Ng.]
- Murrelet, Olympia.*—The Murrelet. A journal of north-western ornithology and mammalogy. Olympia, Washington State. [Nz.]
- Notes Mem. Fisheries Res. Cairo.*—Notes and Memoirs. Fisheries Research Directorate. Cairo. [Nz.]
- Occ. Pap. Santa Barbara Mus.*—Santa Barbara Museum of Natural History. Occasional Papers. Santa Barbara, California. [N.]
- Onderstepoort J. Pretoria.*—The Onderstepoort Journal of Veterinary Science and Animal Industry. Pretoria. [Nz.]
- Prakt. Akad. Athenon.* Πρακτικά της Ακαδημίας Αθηνων. [Athens.] [N.]
- Prirod. Razprave Muz. Društva Ljubljana.*—Prirodoslovne Razprave Muzejskega društva. Ljubljana. [Replaces *Glasnik Muz. Slov. Slov.*] [N.]
- Proc. Coll. Field Cl. Nat. Hist. Soc. Exeter.*—Proceedings of the College Field Club and Natural History Society. University College of the South West of England. Exeter. [N.]
- Proc. helminth. Soc. Washington.*—Proceedings of the Helminthological Society of Washington. [Nz.]

- Progr. Activ. Chicago Acad. Sci.*—Program of Activities of the Chicago Academy of Sciences. Chicago. [N.]
- Pub. Mus. Hist. nat. Paris.*—Publications du Muséum National d'Histoire Naturelle. Paris. [N.]
- Pub. Mus. Hoang ho Pai ho. Tien Tsin.*—Publications du Musée Hoang ho Pai ho. Tien Tsin, China. [N.]
- Rapp. Sta. Biol. St. Laurent, Quebec.*—Station biologique du St. Laurent à Trois-Pistoles. Rapport Annuel. Quebec. (Univ. Laval). [N.]
- Rep. Cambridge Bd. Club.*—Report of the Cambridge Bird Club. Cambridge. [Nz.]
- Rep. Mar. Biol. Sta. Port Erin.*—The Marine Biological Station at Port Erin (Isle of Man). Annual Report. Liverpool. [Nz.]
- Rev. Ent. U.R.S.S.*—Revue d'Entomologie de l'U.R.S.S. [formerly Rev. Russe Ent.]. [Nz.]
- Rev. franç. Entom. Paris.*—Revue Française d'Entomologie, Paris. [Nz.]
- Rev. Muz. Geol.-Min. Univ. Cluj.*—Revista Muzeului Geologic-Mineralogic al Universităţii din Cluj. Cluj. [Ng.]
- Riv. ital. Orn.*—Rivista Italiana di Ornitologia. Pavia. [Nz.]
- Skrift. södra Sverig. Fiskerifor. Lund.*—Skrifter utgivna av Södra Sveriges Fiskeriförening. Lund. [Sc.]
- Spec. Pub. Amer. Comn. Intern.*—Wild Life Prot. Cambridge Mus. Special publication of the American Committee on International Wild Life Protection. Harvard Medical School. Cambridge Mus. [Nz.]
- Terre et la Vie. Paris.*—La Terre et la Vie. Revue d'Histoire naturelle. Paris. [N.]
- Trans. Soc. Brit. Entom.*—Transactions of the Society for British Entomology. Southampton (formerly Trans. Ent. Soc. S. Engl.). [Nz.]
- Trav. Comm. Étude Quaternaire, Leningrad.*—Travaux de la Commission pour L'Étude du Quaternaire de L'Académie des Sciences de L'Urss. Leningrad. [Ng.]
- Trav. Inst. Géogr. Univ. Cluj.*—Travaux de l'Institut de Géographie de l'Université de Cluj (Roumanie). [N.]
- Trav. Inst. zool. Leningrad.*—Travaux de l'Institut Zoologique de l'Académie des Sciences de l'U.R.S.S. Leningrad [replaces Annu. Mus. zool. Acad. Leningrad] [Nz.]
- Univ. Washington Pub. Oceanogr. Seattle.*—University of Washington Publications in Oceanography. Seattle. [N.]
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